



Jim Collas, Amiga Inc.'s New President

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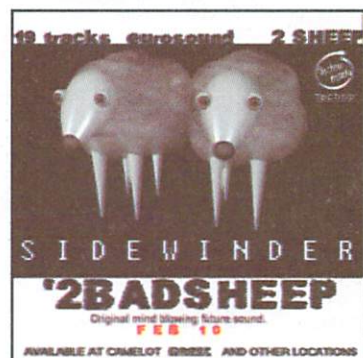


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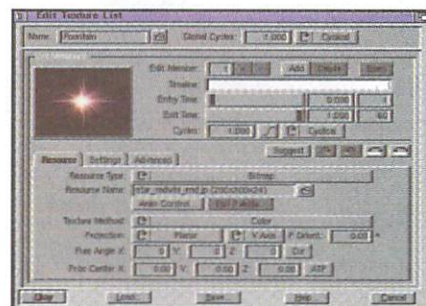
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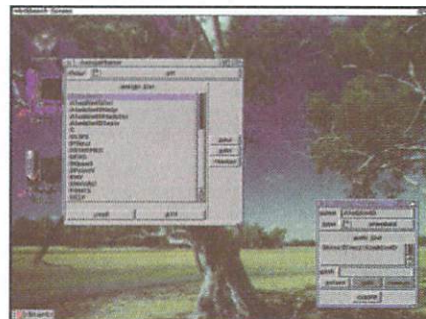
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Editorial Content

A New Captain at the helm, Jim Collas takes control of Amiga Inc.

The only time I ever met Mr. Collas in person was at last May's World of Amiga in London. For any of you that have seen the video we made of the event, Jim Collas is the gentleman who, towards the end of the morning question and answer session, stood up in the audience and assisted Jeff Schindler in answering questions. It is apparent that he was concerned and driven. He wanted to assure those Amiga users that the Amiga was still viable while still making way for what he knew was the future of the Amiga if not for all computer systems.

As this issue was going to press, I was able to talk with Mr. Collas by telephone, about the changes at Gateway and at Amiga Inc. I was somewhat frustrated because, even though the changes were being made, an "official" press release had not yet been generated. Therefore, much of what I wanted to know, such as the direction of Amiga Inc. and the programs that would be initiated, were not available, however, the vision was.

First, let me state that Jim Collas was adamant that Jeff Schindler was remaining on staff to work with Amiga Inc. Mr. Collas went to great lengths to assure me that Jeff was moving over because Amiga Inc. had reached a place that required a different set of skills and those skills belonged to Jim Collas.

To take the position as President of Amiga Inc., Jim Collas had to leave his Senior Vice Presidency at Gateway. This was no small task. Forget what a Senior Vice President must make in salary, perks, and stock options. Just the fact that you are a Senior Vice President is a reassurance that the corporation thinks the best of you.

I have been told that, in the Navy, billion dollar aircraft carriers are protected by a fleet of subs, destroyers, and battleships. To add a further level of protection to that carrier, the Navy places the entire operation under the control of



Jim Collas (left) talking with members of the Amiga press at World Of Amiga London '98

an Admiral who is stationed on the carrier. Wherever that carrier goes, the Admiral is on board. The crews don't want to lose a carrier and they definitely do not want to lose an Admiral. Admirals are important. There really aren't that many of them and each is a highly trained, very seasoned professional the service cannot afford to lose.

I believe Gateway is looking at the Amiga and Jim Collas in the same manner. Currently, Gateway has nothing outstanding that separates itself from the competition. While they are great marketers, they are still doing battle with a multitude of large and small companies that are basically building the same product. Amiga Inc. could easily provide needed separation. In comparison to Gateway's everyday expenses, Amiga Inc. has not cost them that much. However, if they are about to tie the Amiga to one of their best corporate management members, then they have increased their risk factor dramatically.

With the combination of the original Amiga technology, the further developments of QNX, and the marketing and production power of Gateway, it is apparent that smaller, faster, and more portable information technology is Gateway's aim. In a market of smaller PDAs, wireless communications, intelligent appliances and more, Gateway must look ahead to see where their next markets are going to originate. In the case of the Amiga, it could be in their own patent protected backyard.

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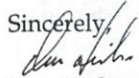
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Vista Pro 3.0.05	39.95
Visual FX CD Lightwave - 1 or 2	129.95
Visual FX CD Image FX1, 2, 3, or 4	129.95
Wipe Studio	137.95
World News	39.95
Y-DIVE	39.95

Now remember, this is all speculation. It is based on the multiple times Amiga Inc. has displayed their stair steps of consumer products from game machines to video work stations. However, it is a fair bet that they are looking at a litany of products that they can produce based on the Amiga.

Where does that leave the Amiga market? We could be just fine. First, we have a machine and an operating system that already does what we want. Second, we have a motivated company that needs to create new horizons. Third, we know that whatever they create, it will still require programming, tools, processes and more. Our only question will be how much Amiga users will be able to capitalize on Amiga Inc.'s momentum.

As for vision, Jim Collas asked for this position and his old job now belongs to someone else (his biography has been removed from the Gateway web site). He believes in the Amiga's potential and sees the opportunities. His only hesitation to my questions was that he was not yet cleared to speak about Amiga Inc.'s immediate goals. While he did say that the new development system was on target for the second half of this year and that OS 3.5 was still aimed at the first part of this year, he was not able to give particulars. He stated that it would be a few weeks until things were arranged.

OK, we have heard this before from Gateway as well as a long line of pre-Gateway Amiga wannabes. However, this time Gateway strapped a Senior Vice President with a history of accomplishment onto this project. So I have two reasons to believe they are sincere. One, Jim Collas is important enough to Gateway to make sure this will happen and, two, the Amiga 99 show in St. Louis will be held in a few weeks and Amiga Inc. will be there. I can't wait for next month's issue.

Sincerely,

 Don Hicks
 Managing Editor

Jim Collas of Gateway has been named as the new head of Amiga Inc.

By Fabian Jimenez

Inside Gateway sources indicate that Amiga Inc. will announce the appointment of Jim Collas as CEO of the company within days of this issue going to press. This move is sure to bolster the efforts of Amiga Inc. Jim Collas is currently a Senior Vice-President of Product Development at Gateway. If this move proves true, Mr. Collas will bring with him years of experience, and a



Jim Collas fielding questions from Amiga users at WOA in London, May, 1998.

reputation for getting things done. It is also said that Jeff Schindler will remain as General Manager of Amiga Inc. and will report directly to Jim Collas.

As a Gateway top executive, Jim Collas has been mostly involved with product development, serving as the department's Vice-President and now Senior Vice-President in charge of worldwide projects. This position is one of the highest levels of Gateway executives. Jim Collas' official biography was removed from the Gateway web site just as this issue was going to press. However, it once said:



James Collas
 Senior Vice President
 Product Development and
 Management

Jim joined the company in June 1992 and was responsible for the company's Product Development department. He was promoted to Vice President of Product Development in December 1992. In 1994, Jim changed responsibilities to oversee the company's technical services and support operations. Jim was recently named Senior Vice President responsible for Product Development and Management. Before joining Gateway, Jim was the President of Anigma, Inc., a PC system board and motherboard design and development company which he founded in 1987. He received a B.S. degree in Electrical Engineering from the University at Los Angeles in 1984.

Various Gateway Vice Presidents have had their hand at monitoring the progress of Amiga Inc. Starting with Rick Snyder—who left Gateway but still sits on the board of directors—other Vice Presidents like Jim Collas and Steve Johns have always influenced the direction of Amiga Inc.

If Collas' appointment as CEO of Amiga Inc. indeed manifests, it will mark the first time any senior official of Gateway takes direct and open control of Amiga Inc. Mr. Collas' position at Gateway will be reappointed.

•AC•

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FEEDBACK

A new Amiga music CD plus suggestions on the new format.

Howdy AC,
Texas Greetings.

I'd like to announcing my new Amiga made music disc '2Badsheep for all Amiga Music fans for 1999. I invite you to visit my website and hear some mp3 songs off this disc. <http://www.txdirect.net/~sidewind/newcd.htm>

This Album is Amigasynth/technopop and euro styles. You can also find my original Amiga produced CD, Future Shock 2 available for a special price.

Sidewinder Website:

<http://www.txdirect.net/~sidewind/>

~sidewind/

MODs/MP3s ART Amiga Made

Sincerely,
Eric Gieseke
SWP

Good Luck! Just for fun, I visited your site and checked out your poster. We will put your announcement in our New Products section in this issue just in case some people miss this letter.

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Circle 126 on Reader Service card.

Dear AC:

Regarding the "merger", expecting the Amiga community to support 2 here in the states is asking a bit much and I agree there should be only one. Both had good and bad points and hopefully you've taken the best of both. Informer's strength was breadth and depth, Amazing was more professional, a maturity that only experience gives. Together they should be a perfect combo!

The choice of paper is GREAT! I much prefer it to the harder-to-read-under-direct-light glossy. Keeping the cover glossy, however, is again just right. Except for the cover, I like your color on the cheap paper too! Don't change a think here.

I was surprised not to get more content. I was also surprised that some of the Informer adds are missing. During lean times, the ads that always seemed to get in the way during the fat times are missed.

A small nit: Some of the images were on the dark side, such as the back issue clips and some of the photos. Almost everything could have been a little lighter. The Informer did this part pretty well. Lighter tends to look cleaner, perhaps because of the smaller dot size(?)

Overall, though I like it a lot! Some of us ARE still spending \$\$ on their Amigas, and I for one would enjoy seeing in-depth articles comparing graphic cards, accelerators, towers, etc. Just some food for thought.

Thanks for still being around and keep up the fine work!

Peter Schaff

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19 tracks eurosound 2 SHEEP

SIDEWINDER

2BADSHEEP

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FEB 10

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Thanks for the insight. The change to black and white has caused some problems with the pictures. What is apparent in a color photograph, lacks distinction in just black and white. However, our authors are aware of the problems and they have been doing their best to improve the initial photographs.

As far as content, let's be fair. AC has been providing more editorial to advertising content than almost any other newsstand publication in North America. Our percentage of advertising is one of the lowest in the industry of all magazines. This, of course, is nothing to be proud of. Without advertising, products don't get sold and magazines cannot stay in business.

The bonding of Amiga Informer and Amazing Computing/Amiga was necessary due to the size of the marketplace. We continue to hope the changes in the market and the promises of the newly redesigned Amiga Inc. will provide more opportunity to everyone in the Amiga marketplace.

If you want to help, Don't forget to mention that you saw their ad in AC the next time you buy a product. Or, if they are not in AC, ask them to advertise.

Amazing has always offered its readers the best in content and support. We offer the same to our advertisers. Our aggressive pricing is far less than other niche magazines in the same size markets.

It's simple, we stay in business because there is business and we do our best each day to keep the Amiga moving forward. Our readers know this and so do our sponsors. With the help of the Amiga community, all of us could really move mountains. -ED.

Please Write to:
FeedBack

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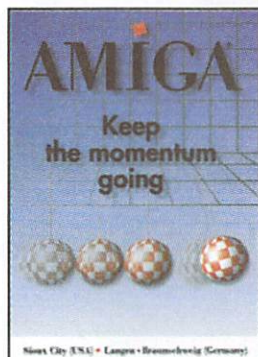
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NEW PRODUCTS

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Three New Software Programs From Safe Harbor

Safe Harbor has announced that they are shipping three new software programs. **Alternate Video Wipes Vol. 1#1**, from Alternate Video is a must have for video production purposes. This CD is jammed full of wipes for the Video Toaster. The title includes: 85 matte and regular wipes, 30 color wipes, over 50 brushes, 35+ backgrounds, 30 toaster fonts, and two handy utilities. The CD comes in a jewel case with a printed information sheet. Requirements include a Toaster and either a 2000, 3000 or 4000 computer. The package is now available for the price of \$479.99.

Digital Juice for NLE from Dimension Technologies is a 16 CD set created to enhance any video production at a value saving price of \$269.00. For this great price you get 40 loopable moving backgrounds, as well as 600 graphical high-end still backgrounds, original photographs, and 300 marble granite and texture backgrounds. Also included is a full-color index and free videotape. All that is required is a non-linear editor. The graphics are provided in multiple formats so they can be used in any system, however, included is a program that can convert the graphics to other formats, if needed.

LightROM Super Bundle, from Graphic Detail is a Safe Harbor exclusive. This collection of 17 CDs includes LightROM Gold, LightROM 4, 3000 JPEG Textures, Light-ROM 5 (3 CD set), LightROM 6 (4 CD set), multimedia backdrops, studio meshkit, and much more. The set sells for \$99.00.

Safe Harbor Computers, W226 N900
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548-8120, Fax 414-548-8130, Tech Support/
RMAs 414-548-8159, Online at
www.sharbor.com

Microvitec 1438S/1538S/1764S & SVGA Utilities

This product is a new monitor driver that really works. It was written by a Belgian team and allows the user to use the Microvitec multisync monitor with no black border on the left and right of the screen. Moreover, it gives the user a full 800 X 600 (58Hz) workbench that looks like the user has a graphic card. The driver also works with any SVGA monitor. There are two versions on the one disk: one version for owners of ROM 3.0 and one version for 3.1 ROM owners. It is very easy to install with a notice in English and French. The price is \$15US.
Amiga Service, Rue du Nord, 93, 6180
Courcelles Belgium, Tel: 00 32 71 45.82.44,
Fax: 00 32 71 46.10.76

Aminet 29

Aminet 29 dated February 1999 has been released. As with all Aminet CDs this one is also packed with new goodies. This latest offering includes a full version of ArtEffect 1.5. Look for it now at your local dealer or favorite mail order company.

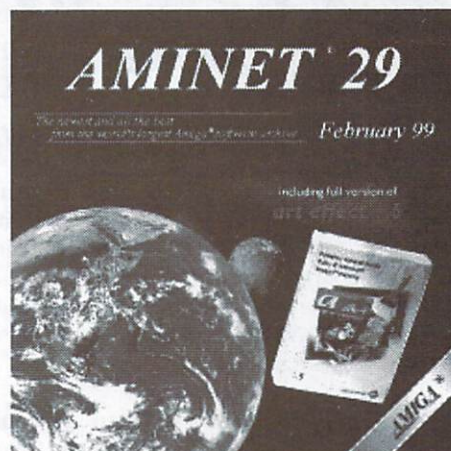
Stefan Ossowski Schaztruhe, Gesellschaft
fur Software mbH, Veronikastraße 33,
D45131 Essen

New Amiga music CD

Sidewinder has announced 2BadSheep for all Amiga Music fans for 1999. The Album is Amigasynth/technopop and euro styles from the people who produced Future Shock 2, another Amiga created CD. Mp3 songs from the disc are available at: <http://www.txdirect.net/~sidewind/newcd.htm>.

Please Note:

The press releases and news announcements in New Products are from Amiga vendors and others. While Amazing Computing/Amiga maintains the right to edit these articles, the statements, and claims made in these reports are those of the vendors and not AC.



Port Monitor

IDD has announced the release of the IDD Port Monitor software. With this software and an Amiga computer, you can wire sensors from doors, windows, or anything else to your computer. The software runs in the background, scanning the sensors and reporting its readings. The software runs on ANY Amiga computer (AmigaDOS 1.3, 2.x, 3.x).

Port Monitor uses any of the sensors sold in electronics and home security shops that are designed for wired security systems. These include reed switches for door and windows starting at around a dollar each. You can also use vibration and glass breakage detectors, or even infrared and ultrasound sensors to detect motion in an area. In fact, you can use digital keypads and lock & key switches to activate or disable the system remotely. You can find all of these devices at electronics and security shops, including Radio Shack.

You connect the sensors to the Amiga through the joystick controller ports. This leaves your serial and parallel ports free for your modem and printer. Note that no hardware is included with the Port Monitor, it is up to you to wire an



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interface to your sensors. This isn't hard to do, and the documentation tells you everything you need to know.

Using the included configuration program, you can tell the software to respond to a sensor by playing a sound file, speaking with the Amiga's voice, recording the event to disk, sending output to your printer, dialing a phone number with your modem, sending an ARexx command, and more.

You can use the IDD Port Monitor as a home security system, or use it just for the fun of having your computer respond when someone opens a door or walks into a room. The software allows you to choose to have it respond differently at different times of day. It also reports the time of sensor events with accuracy of one hundredth of a second, making it suitable for scientific measurement.

The IDD Port Monitor is now shipping and sells for US\$34.95 and is currently only available directly from

IDD (international distributors wanted!). For more information see their web page at <http://www.pobox.com/~idd/>.
IDD Software, 209 Brom Bones Lane,
Longwood, FL 32750, USA, email:
idd@pobox.com

Amiga Portal

The game designers, clickBOOM have announced, "The clickBOOM Amiga Portal". The Portal is a new way for clickBOOM users to access online information. The Portal consists of five sections: Auctions, News Center, Communications Center, Status Information, and Preferences. The Portal will provide a fully automatic real-time online Auction section. Subscribers can bid on or sell Amiga-related items.

The News Center is a compilation of some 50 independent newsites around the web. As each site updates their news, The Portal will also update. Subscribers can dictate in which order they want their news displayed.

The Communication Center allows registered clickBOOM users to communicate with clickBOOM directly. clickBOOM registered users can also access their status information online, get information such as how many BOOM\$ they have; which games they have registered; what is the status of their last order, etc.

The Preferences section allows users to update personal information such as change of email or mailing address. It also allows for customization of the Portal, such as which News sites you prefer to always see at the front.

The Portal is located at clickboom.com/portal. According to clickboom, "The Portal is not finished, nor will it ever be, it's a constantly evolving flux, just like the Web itself. So, be prepared for even more content very soon, as we get the engine running."

Selling the Farm at Amiga 99

Tsunami Graphics is selling their former A2000 rendering farm. This includes Amiga 2000s, SCSI controllers and RAM expansion cards as well as other hardware and software, too! They promise that all are "in good shape, all needing a good home". All A2000s are stock machines with 30-day replacement or repair warranty. Prices vary, depending on ROM revision. All systems are revision 6.x motherboards with 1MB Agnus.

UGN Announces User Group Startup Documents

The User Group Network (UGN) has announced the availability of the User Group Startup Documents. This kit provides a resource to individuals wishing to start an Amiga related user group in their area. It can also provide useful information to existing user groups interested in making their group better.

The User Group Start Up Kit is a compilation of materials assembled by Robert Hamilton (Lostman). Robert has searched high and low to include information on the following topics: starting up, legal issues, club services, user meetings, user needs, and working with other groups or companies. Also available is the User Group Startup

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Guide from Inprise Inc. (formally BorderBund).

For more information visit <http://ugn.amiga.org/startup>. The UGN Web Page can be found at <http://ugn.amiga.org>.

The Prophet

The Prophet which will be release by late April is a dungeon master style adventure game made exclusively for the Amiga. According to Alive Director, Steven Flowers, The Prophet promises to be a huge adventure game, with astounding features and incredible playability.

Over 20,000 locations set in the city, dungeons, graveyard, crypt, temple and an alternate dimension. More than 50 different types of locations, including

shops, taverns, guilds, spinners, false walls, teleports, buttons, levers, etc. Each type of monster has totally unique strengths and weaknesses, some have poison, disease or magic attack. Some may try to weaken you by attacking your arms or legs, others might beat you unconscious. Four different styles of attack vary in efficiency depending on the weapon used and your skill in that attack. A defensive move, as well as a run away for mummy's boys.

MicroDot II 1.2 and X-Arc 1.3 are now available!

MicroDot II is an integrated stand alone mailer and newsreader written by Oliver Wagner (owagner@vapor.com). It is a part of the VaporWare suite of Internet applications.

- X-Arc is an archive management program for the Amiga, and is based on a modular concept, allowing any third party to develop modules to handle new archive formats without having to alter the main program. - X-Arc offers the ability to perform many operations, using drag&drop, from within the main program or with standard Workbench icons (ie. drag files from your Workbench screen to X-Arc's lister window). X-Arc also supports drag&drop with Scalos based lister windows.

For more information on MD2, -X-Arc, or any other VaporWare products, please see our website - <http://www.vapor.com/>

AMIGA 99

the Gateway Computer Show
The latest information is on the web at:
<http://www.amiga-stl.com>



No Bull



Toasters & Flyers



Amiga Computers



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Steve Nagel

No Bull... just the best Amiga show you will go to this year! Toasters, Flyers, Amigas, hardware, software, new items, old favorites, classes, seminars, a Saturday night banquet, ANNEX for entertainment, and an astronaut. What more could you ask for? Amiga 99, the Gateway Computer Show is being held March 12 - 14 at a larger hotel this year too.

Henry VIII Hotel
4690 North Lindbergh
St. Louis, MO (Bridgeton)

Friday: 9:00 AM - 7 PM Amiga Inc. welcome address. Developers & Dealers classes & seminars. Speeches, presentations, demonstrations that dealers, developers and distributors won't want to miss.

Saturday: 9 AM - 5 PM Beginner and intermediate classes and seminars. Welcome address by Petro Tyschtschenko. A bigger Exhibit hall, door prizes and a Banquet at 7.

Sunday: 9 AM - 4 PM Beginner Intermediate and advanced classes, seminars, Exhibit hall, door prizes and more.

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Amiga...it's taking off, and so is Amiga 99!

See you at the show.

Bob Scharp

Henry VIII Hotel



Anti Gravity Secures Boxer Exclusive Territory

Anti Gravity Products has announced an agreement with Blittersoft, the world wide distributor of the "BoXer," as exclusive supplier of the BoXer motherboard throughout North America, South America and India. The BoXer is the first new design of an Amiga motherboard since the demise of Commodore. It features the latest 060 and PowerPC processor technology as well as the fastest implementation of the AGA chip set to date. Performance specifications for the BoXer surpasses those of the A4000 or A4060 Tower motherboards that were designed around the 030 processor.

Anti Gravity Products will assemble the BoXer motherboard into Alien BoXer Systems. The first model is the "Neila Phase-498" and includes: 060 @ 66MHz, 16MB Ram, 2GB HardDisk, 24xCD-Rom, High Density Floppy, 56K V90 Internal Modem, Internet Software Kit, and ClickBoom Game Bundle.

Visit the new Anti Gravity Products web site (www.antigravity.com), complete with On-line ordering of the Alien BoXer Systems, and for weekly updates on BoXer's ongoing development.

Free Web Server

The Amiga Apache Web server with PHP Web scripting language is now available for free. For Web scripting, PHP (<http://www.php.net>) is one of the fastest growing languages being used in over 300,000 sites in the world. Since PHP is a language available in an Open Source project, it has now been made available in pre-compiled archives for the Amiga. The binary archive may be found at <http://www.php.net/binaries.php3>. The documentation of PHP language may be found in several formats (HTML, PDF, RTF, etc...) at: <http://www.php.net/docs.php3>.

This version of PHP 3.0.6 is available as a standalone CGI based executable or as language module built-in the Amiga Apache executable.

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A Different Perspective:

What if I was to tell you that the next Amiga had already been produced and was already selling for \$349.

by Fleecy Moss

What if I was to tell you that the next Amiga had already been produced and was already selling, projected to reach into the tens of millions? A distributed set of chips built onto a custom system bus and tuned to the gills for performance. Graphics capabilities that exist only on the next generation of video boards for PCs. Inbuilt and seamless Internet connectivity. At home on a TV, HDTV or computer monitor. A core team of ten of the best software developers in the industry producing for it, with more signing on every week. All for \$349.

The look is Amiga, the sound is Amiga, the philosophy is Amiga. Unfortunately the name on the machine isn't Amiga. It's Sega, and the machine is the new Dreamcast.

OK, it's a game machine, but as anyone in the know is aware, the game players have done more than anyone to push computers from piles of junk to impressive hardware platforms. 2D graphics boards, 3D graphics chipsets, 3D positional sound, AGP, USB, FPU performance. It used to be that game machines had their own custom hardware because they needed it. Not anymore.

The Dreamcast uses next generation components that will turn up in home and general purpose computers. By doing so, they get the benefit of a much wider and richer R&D base, vast economies of scale, a standardized HW platform for easier and more consistent software development and a final product they can tune to perfection.

Eerily, the Dreamcast board looks a lot like an A1200 and shares much of the distributed architecture of the later Amiga designs. A 200Mhz Hitachi SH4 coordinates the whole show, but with an FPU core that is capable of 1.4Gflops (4x the power of a P2 266). Sitting around it

is an NEC/Videologic CLX1, the console version of the PowerVR2, an eagerly anticipated next generation graphics chipset claiming 4 million (but probably delivering more like 2 million) polygons per second. Rounding it off is a Yamaha AICA sound chip, supporting 64 channels and 3D positional stereo. With 16MB of main memory, 8MB of video memory and 2MB of audio memory, bus



contention is kept to a minimum. An integrated but modular modem opens up the internet and multiplayer, and the special Yamaha developed GD-ROM (a CD that holds 1 GB) will hopefully prevent casual piracy with CD-RW drives, a real boon to developers.

If someone took this monster, added USB and a hard drive, you would have the next generation A1200, selling for under \$500. Add a PCI bridge, DIMM sockets and upgrade the processor and you would have our mid range and high end models. The CD32 development path in reverse.

What does this have to do with the Amiga? A once ground breaking computer system with a rabid following falling behind through a combination of managerial incompetency and competi-

tor advance. A community heroically waiting for the next generation machine. A company reexamining itself, building new strategies and (hopefully) coming out with new products (and products that the community wants!!!). Seems to me that there is a lot in common. If Amiga Inc. can overcome the usual American corporate arrogance of believing it knows better than everyone else, then they will find there is a lot they can learn.

I don't often say this, but Sega has done one hell of a rebuilding job. To fall from top dog to runt of the litter is often enough to shatter a company. Sega did sit and stew, licking their wounds for a while but even during that period, they continued to support developers working on the Saturn; sadly something that Amiga Inc. did not bother to do for its existing customer and developer base, and with dire but predictable results.

More importantly, Sega pulled back, admitted their mistakes, reexamined the existing and future markets, created a strategy and then poured themselves heart and body into it. This included running two competing designs side by side in an effort to ensure that they would create the best possible product.

Of course a loyal and future customer would expect great efforts to be made in the arena of technology (and Amiga Inc. should be aware of this, that turning out new hardware that is merely quite good after 2 years of promises will win them little praise). What holds Sega up as a shining example are the efforts they made in other areas.

They have spent a large percentage of the Dreamcast resources on creating an excellent developer support package that not only includes tutorials, knowledge sharing and community building

TECH SPECS



Revolutionary
Packing arcade power, Sega's Dreamcast will be the most powerful console to date!

CPU: Hitachi SH-4

- 200MHz clock rate
- 300 MIPS (millions of instructions per second)
- 1.4 billion floating-point operations per second
- 3D calculations
- 800+ MBytes/second bus bandwidth

Graphics Core: NEC PowerVR Second Generation

- 3 million polygons/second peak rendering rate
- Perspective-Correct Texture Mapping
- Point, Bilinear, Trilinear and Anisotropic Mip-map filtering
- Gouraud shading
- Z-buffer
- Colored light-shading
- Full scene anti-aliasing
- Hardware-based Fog
- Bump mapping
- 16.77 million colors
- Hardware-based texture compression
- Shadow and Light volumes
- Supersampling

Memory

- 16 MB main RAM
- 8 MB video RAM
- 2 MB sound RAM

Sound: Yamaha Audio Core

- RISC CPU
- DSP for real-time effects
- 04 sound channels
- Full 3D sound support
- Hardware-based audio compression

Storage Media: CD-Rom

- 1 Gbyte data storage
- 12x speed Constant Angular Velocity drive

Control Pad

- Digital and analog directional controls
- Dual analog trigger
- Visual Memory System data save unit

VMS Unit

- Energy-saving 8-bit CPU
- 128K byte memory
- 16x02 dot monochrome LCD display
- 37x26mm display size
- Button battery x 2, auto off function
- PWM 1 channel sound source
- Size: 47mm(W) x 60mm(H) x 16mm(D)
- Weight: 45g

Expansion Options: Modem

- 33.6Kbytes per second transfer rate
- Upgradable



Mind-boggling
Play the games previously available only in your dreams, only on your Dreamcast.



Definitely Cool
The VMS (Visual Memory System) adds a new element to gameplay.

The Sega.com web site for Dreamcast posts some very interesting specifications.

but also a comprehensive set of design, development and content creation tools. One of their chief strategies from the beginning was to enable easy porting and provide added value to a developer's product portfolio. This is the primary reason they licensed the DirectX set of APIs (not worth a bucket of lard until DirectX5 and now looking increasingly useful) because it allows for developers to write a PC version and then very

easily create a Dreamcast version. Having a large PC and Console market so close together may be just too tempting for most games houses. Sega is hoping so anyway.

But they have also honored the community. For 18 months now, they have been "leaking" small details of the Dreamcast, letting the users, developers and retailers know that something amazing was coming, that there was

hope for the future. Once they had selected a final model, they really went into overdrive, bringing in all the influential journalists and giving them the lowdown on the new system. The crowning act though, were the series of adverts depicting the head of Sega Japan walking lost around various arenas, bumping into users, asking for their wisdom and apologizing for the way Sega had dropped the ball. In a country where the Bushido philosophy still runs through everyday life, such an open display of humility had a profound effect.

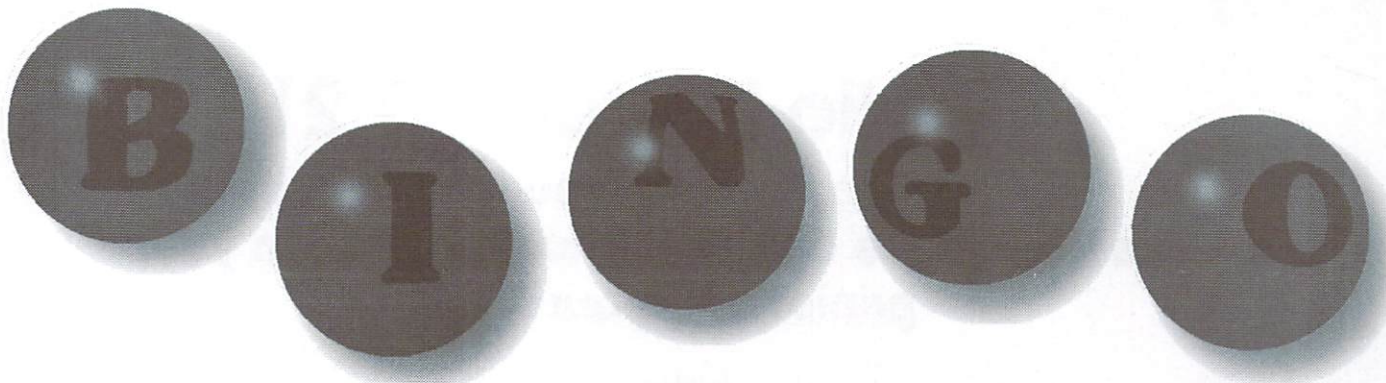
Dreamcast sales are going well in Japan despite a relatively poor initial software offering. The American launch is 6 months away, and every day, there is more news of a major developer working on a Dreamcast product. Diehard Sega fans have something to look forward to once again. Nintendo may have fluffed it with the N64, and even with the very impressive specs of the new Sony/Toshiba PSX2 chip, giving Sega an 18 month lead may be enough to give them the success they deserve. Of course, it may not. Despite all their good work and planning, the public may not take Dreamcast to its heart. IF Amiga does get product out the door AND it is any good, it may find itself in a very similar situation.

A few years ago, Commodore UK put up a large poster on a billboard just across from the Sega offices in London. It had a picture of the CD32, the world's first 32-bit game machine, along with the legend "To be this good will take Sega ages". Truth be told, it has taken them 14 years, but they have really done their homework and learned their lessons. Now Amiga is the one behind. I just hope the management at Amiga Inc. learn their lessons more quickly.

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Please Note:

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Using ImageFX to get “around” a problem.

By Nick Cook

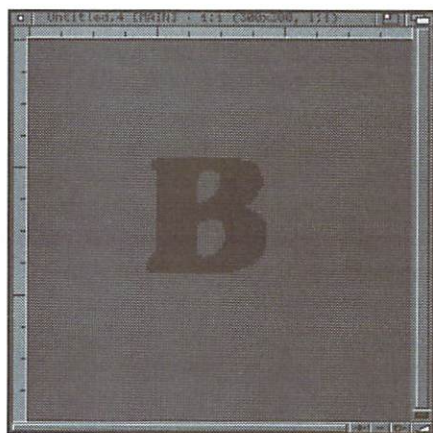


Figure One: The ratio of character size to background will determine how large your letters will appear on the ball. The font here weighs in at a hefty 114 points.

You know the “Bingo” game (or the grown-up variant, PowerBall). A turning cage spits out balls with letters and numbers printed on them. Let’s reproduce those balls for the printed page. Follow the bouncing ball, er, steps to create shaded spheres which hold text. We’ll use ImageFX 3.

STEP ONE: Use the Buffer Panel to create a buffer at least 300 by 300 pixels. Fill it with the color you want your sphere to be.

STEP TWO: Click on the Text icon to bring up the requester. Select a font and add the first letter of your headline to the list.

STEP THREE: Stamp the letter in the middle of the buffer created in Step One (Figure 1). Save the buffer as a file.

STEP FOUR: Working calmly and efficiently, erase the letter with a filled rectangle. Repeat Steps Two and Three until you’ve got all the characters you need.

STEP FIVE: Create a new buffer to hold the entire headline.

STEP SIX: Load the first letter as a Brush. Select Spherize from the Distort panel. The Spherize interface fairly bristles with gadgets (Figure 2), but we only need the Rotate X and Rotate Y sliders. Rotate X turns the sphere (and our letter) right-to-left. Negative numbers spin the ball left and positive to the right. Rotate Y tilts the sphere up and down. Enter a negative number to tilt the ball up

and a positive number to go down. Fiddle with these two controls until you are satisfied. Click Okay.

STEP SEVEN: After the sphere is rendered, stamp it down in the buffer created in Step Five.

STEP EIGHT: Repeat Steps Six and Seven for the rest of the letters.

STEP NINE: If you want, run a light Gaussian Blur over the headline to smooth out any jaggies.

Just for trivia’s sake, or bragging rights, a similar effect for Photoshop takes about a dozen steps! These don’t have to be bingo balls, of course. This technique can create billiard balls or balloons.

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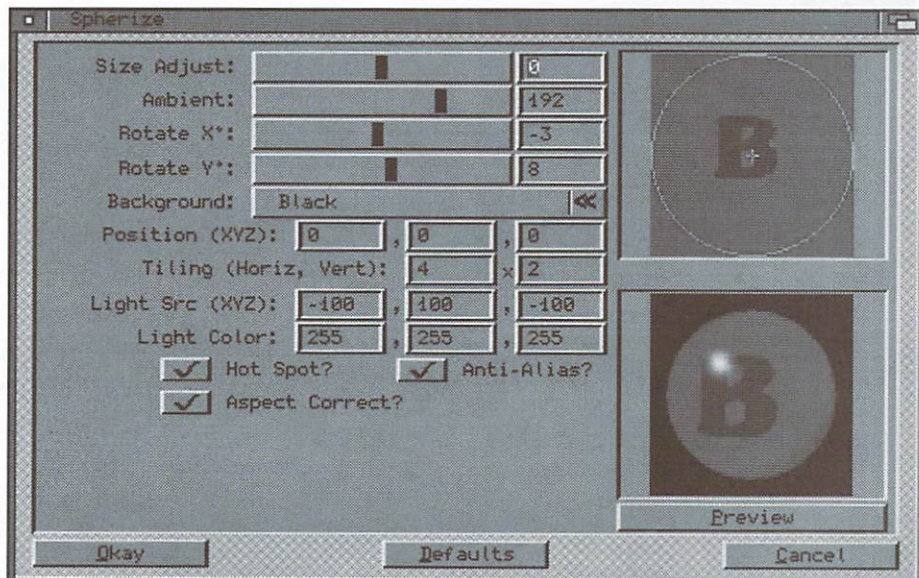


Figure Two: Be sure that the background is larger than the reference circle in the top right thumbnail. If you don’t, your sphere ends up looking more like an egg.

Studio Printer v. 2.21

One way to improve your printer output is to improve communication between your printer and your Amiga.

by Steve Folberg

When you think of "Amiga Heroes," names such as Jay Miner, Dave Haynie, Holger Kruse, Petro Tyschtschenko and others probably come to mind. I would propose adding Wolf Faust, author of the Amiga printer software, Studio Printer, to that list.

I can't imagine that anyone else in the Amiga community knows more about printing on the Amiga than Mr. Faust and he has shared that expertise with us for a few years now. In addition

to having authored and aggressively updated the commercial shareware Canon Studio packages since 1992, Wolf has also developed, updated and made available (free of charge) the official Amiga printer driver disks for Canon, Star, Panasonic and Seikosha printers. Of course, Mac and Windows users can assume their printers will come pre-packaged with drivers for their machines, and, while Amiga users aren't normally quite that lucky, Wolf's hard

work has made it almost as easy for users of these printers to get their Amigas and printers talking peacefully to each other.

Why?

Why the need for a special printer software package for the Amiga? There are two primary reasons. First, none of the latest, most advanced printers (Epson Stylus color inkjets and Canon color Bubblejets for example) are

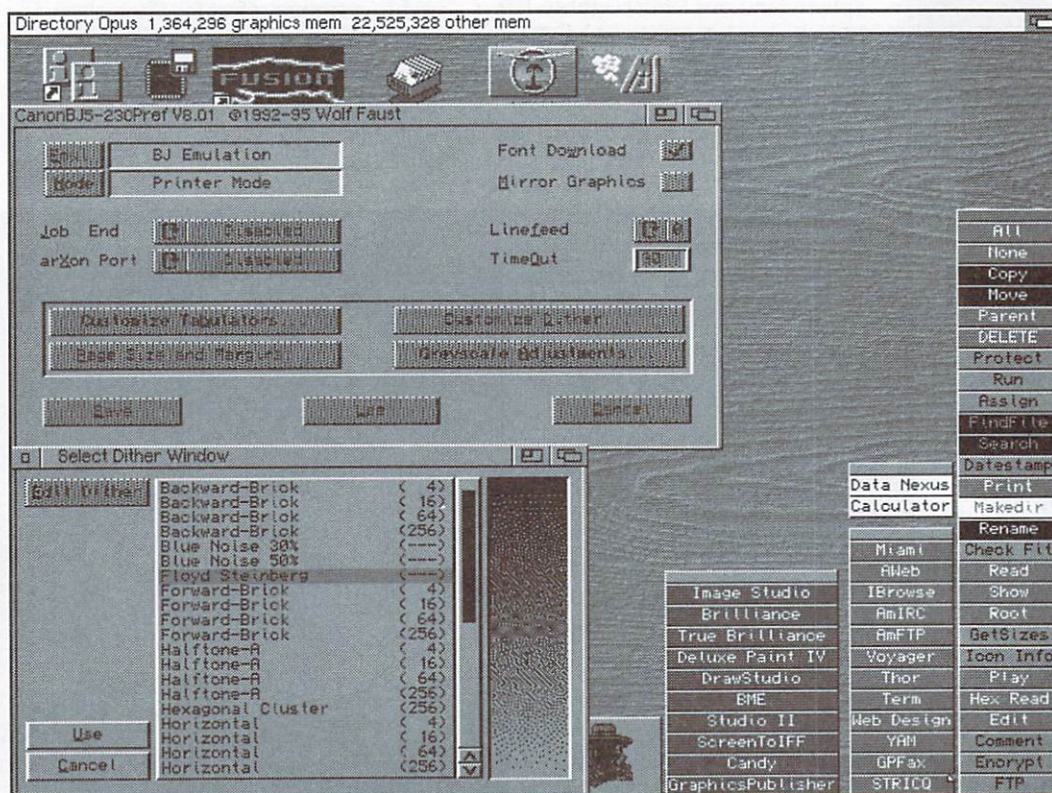


Figure 1: The Printer Driver Prefs windows (Canon BJ5-230) with its dither selection requester open.

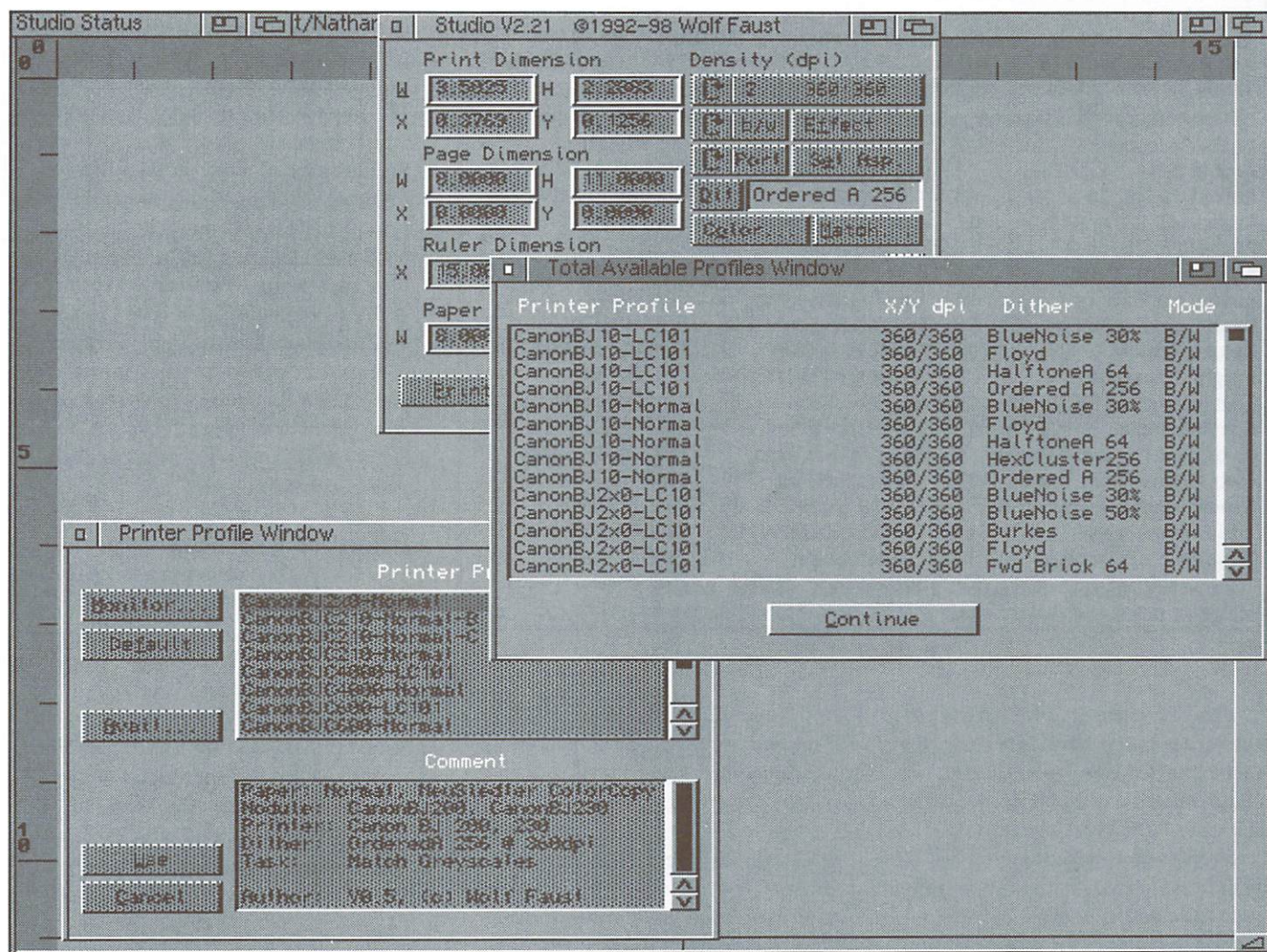


Figure 2: The Studio application interface, showing the main configuration, Color Match and Printer Profile windows open.

directly or fully supported by the standard Preferences printer drivers that came with your Amiga's Workbench install disks. Second, the native Amiga Preferences drivers are limited to 4096 colors or 16 shades of grey. The result is that color and gray-scale printing through those standard drivers, even with dithering applied, will tend to look banded, blotchy and generally miserable.

Two Amiga software packages come to the rescue on both counts. I recently reviewed one of these, Turbo Print, in Issue 15 of *Amiga Informer*. In this review we will take a close look at the other contender which promises Amiga printer bliss, Faust's Studio Professional 2.21.

Studio Professional ships on a single CD-ROM. An update from version 2.2 to the current 2.21 is available on Aminet. I was able to test it on my A1200 with a

50Mhz '030 accelerator and 32MB Fast RAM, appraising both greyscale output to a Canon BJ-200 printer and color output to an Epson Color Stylus 600. Test prints were made to both "cheapie" all-purpose printer paper and to more expensive Epson coated High Quality Inkjet Paper (product #S041111).

Installation takes place via the standard Amiga installer program and is a fairly easy affair, although I did seem to run into a glitch in the install script when installing multiple printers, which necessitated going back, unarchiving an lha'ed directory, and installing the Canon "printer profiles" (more on these below) by hand. No printed manual is included, but the CD contains the complete Studio Professional manual in printer dump-file form, as well as a program for viewing

the files on your monitor and a separate program for printing out the manual. Be forewarned: the complete manual is 178 pages long (printing it out consumed nearly an entire ink cartridge on my BJ-200). You could conceivably use the Show Manual utility to either read the entire manual on your monitor (ibuprofen not included!) or to decide which pages are relevant to your printer and then print out only those pages. It would probably be more of a hassle than simply getting the manual printing and going out for dinner! The manual itself not only offers detailed explanations of all of the functions of the programs, but it also contains a considerable amount of background in "printer theory," dithering techniques, and so on.

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The complete Studio Professional software package consists of several interconnected components. First, there is a large selection of 24-bit printer drivers. These are 100% Workbench compatible Preferences drivers, although they include associated configuration programs allowing you to set the dither method for color or greyscale printing, the page size and so on (see Figure 1). In this respect, Studio Professional parts company with Turbo Print's philosophy — while TP's drivers are not Workbench compatible and totally bypass the Amiga's printer.device, Studio works within the Workbench environment and provides additional configurability for each driver. Additionally, some drivers have a "Setup" program module which enables software adjustment of things like print head alignment and cleaning, internal font selection, and so on.

Next comes the Studio picture printing program itself. Studio enables you to print picture files in a wide variety of bitmapped graphic formats in 24-bit (16 million color) accuracy or in smooth grey scales, using very little memory. (Indeed, the hardware requirements of the entire package are quite modest: Workbench 2.04 or above and a megabyte or two of free memory are all that is required.)

Not unlike Turbo Print's "Graphics Publisher" program, Studio allows you to position and size your picture on the page and then print it in the background via Studio's built-in print spool buffer while you do other things on your Amiga. While you may print from Studio to a Workbench Preferences driver, Studio comes with its own, advanced and highly configurable Output Modules for various printers, which take advantage of many of the printers' special features which are unavailable to standard Workbench drivers (Microweave printing on Epson Stylus Color models, for example).

I do find Studio's interface annoying, though. By default, when started from Workbench, it presents the user with a standard file requester. Select the file and Studio opens its screen (on Workbench, by default) and loads the picture. When it finishes printing, Studio closes its screen again and forces you to go back to the file requester. While probably memory efficient, I find this approach cumbersome and wish that Studio's screen could simply be left open or iconified.

A particularly interesting feature of the Studio program itself is its implementation of a Color Management System, which the manual claims is similar in concept and design to the way that Windows 95/98 handles color printing.

In effect, this is a set of pre-calibrated parameters for the Studio's various printer Output Modules.

In plain English: for a given printer, Studio comes with a set of pre-defined Profiles, each of which applies to a particular combination of dither method, print density and print medium (e.g., normal or glossy paper, transparency film, and so on). By choosing to print with a combination of density, dither type and medium type that corresponds to one of the printer profiles and selecting "Match" in Studio's prefs window, you should be able to achieve optimum quality in color or black and greyscale picture printouts.

Pagestream Bonuses

The Studio Professional package comes with two special bonuses for Pagestream users. First, the single best feature of the Studio package may be that once you have installed Studio, Pagestream 3.x can print directly to Studio (via the Studio "server") in much higher quality and speed (and with support for more printers) than the custom drivers shipped with Pagestream. Once Studio is installed, you simply select "Studio" as your printer "Type" in Pagestream's Print Setup requester.

As an added bonus, Pagestream users also get a "Universal [Graphics] Filter" which allows quick loading of many bitmapped graphic formats into your Pagestream documents, including PCX, Targa, PNG, JPEG, OS 3.x datatypes and others not natively supported in Pagestream. This is an especially tasty gift for Pagestream owners, since Softlogik charges extra for its JPEG import module alone!

What do we have?

So how does it all fit together? On the one hand, Studio Professional is capable of providing fine printouts, and the Pagestream printing capability and graphics import filter features are marvelous. Additionally, printing pictures from Studio is (especially if you are used to the usual slow speed of Amiga graphics printing) astonishingly quick, although speed depends upon your CPU, print density and the dither method you choose.

On the other hand, while Studio is a "tweaker's" dream, the drivers and Studio output modules are so configurable (and unfortunately, some of the adjustments are so arcane) that you may find yourself spending hours first figuring out how everything works, and then more time testing combinations of assorted parameters to get printouts with which you are satisfied. I would expect a fair amount of fussing, test configuring, head-scratching and manual searching in learning to use, say, a complicated 3-D modeling program, but when it comes to printing I want to make a few easy choices, get on with my life (and my printing) and achieve beautiful output.

Unfortunately, while the use and configuration of the Studio Workbench printer drivers themselves is fairly straightforward, the amount of complex tinkering and parameter adjusting that may be needed to get optimum quality from the Studio Printer program is simply far greater than acceptable. The main reason is this package needs a user interface overhaul.

One example of this is that a full configuration of Studio using the Color Management System requires you to negotiate your way through a series of separate requester windows (see Figure 2) in which you calibrate Studio to your monitor; select dither, density and b/w or color; find a matching Printer Profile (or go back to trying another combination of dither, density and shading if no Profile is available); remember to check Color Match System in its requester checkbox; and make sure that print dimension, paper dimension and page dimension are set correctly in a separate Studio requester. (Note: you will get error messages if you select US Letter size page dimensions in Studio, even if the numbers are correct, because Studio defaults to A4 "Euro" size.)

Even with all of this adjusting and use of Color Match, I found color printing to the Epson Color Stylus 600 to be unpredictable: depending on the Printer Profile-Color Match combination I used, some printouts were too dark or light, others showed strange color aberrations. To be fair, Wolf Faust was great about promptly answering my questions by e-mail, and it may be that,

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with a better understanding of Studio's parameters and adjustments, I could have achieved better results. But, it should be easier than it is.

Conclusions

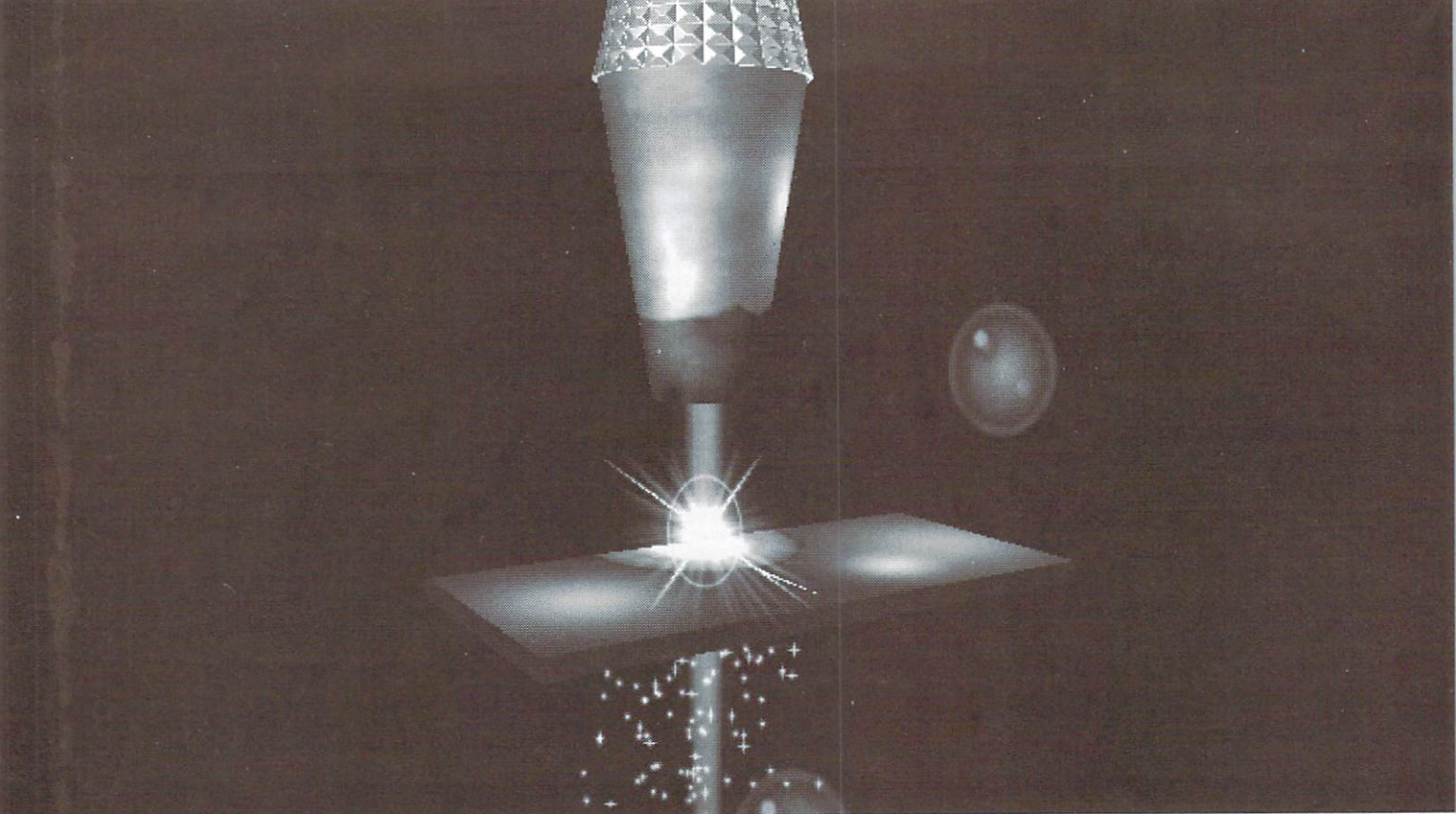
Studio is a venerable Amiga product and Wolf Faust has been a tireless Amiga developer over the years, making it somewhat painful to find so much fault with it. I should also note that had I not tested the Turbo Print system for a previous review, I would have given Studio a higher rating.

However, while Studio is a substantially cheaper product than Turbo Print here in the States, I find Turbo Print stronger (and worth the extra money) on several counts: it offers a fine, well organized, printed manual; its configuration is logically organized into a single prefs program with options cleanly grouped into multiple "tabbed pages;"

Graphics Publisher allows you to see an on-screen preview of your picture before you print and permits the printing of multiple images on a single page, whereas Studio provides only a box

outline of your image and only permits one image per page (although Wolf Faust tells me that a full preview feature — and an overhaul of both the Color Management System and the Studio user interface — are planned for a future release). Additionally, the latest version of Turbo Print, which I have not yet been able to test, is supposed to provide (finally!) direct Pagestream support and Ghostscript support (for printing Adobe .pdf files).

Finally, I have generally found Turbo Print's claim of "perfect printouts from day one" and "no need for test printouts" to be valid, whereas Studio, at least in my experience, is much more of a challenge to understand and configure. All in all, I would give Studio Professional a C+ rating. Studio Professional is available from most Amiga dealers and mail order houses for around \$40.



Aladdin 4D: Cutting Torch Animation Project Tutorial

Part 6: Aladdin's Fountain of Sparks

by Dave Matthews

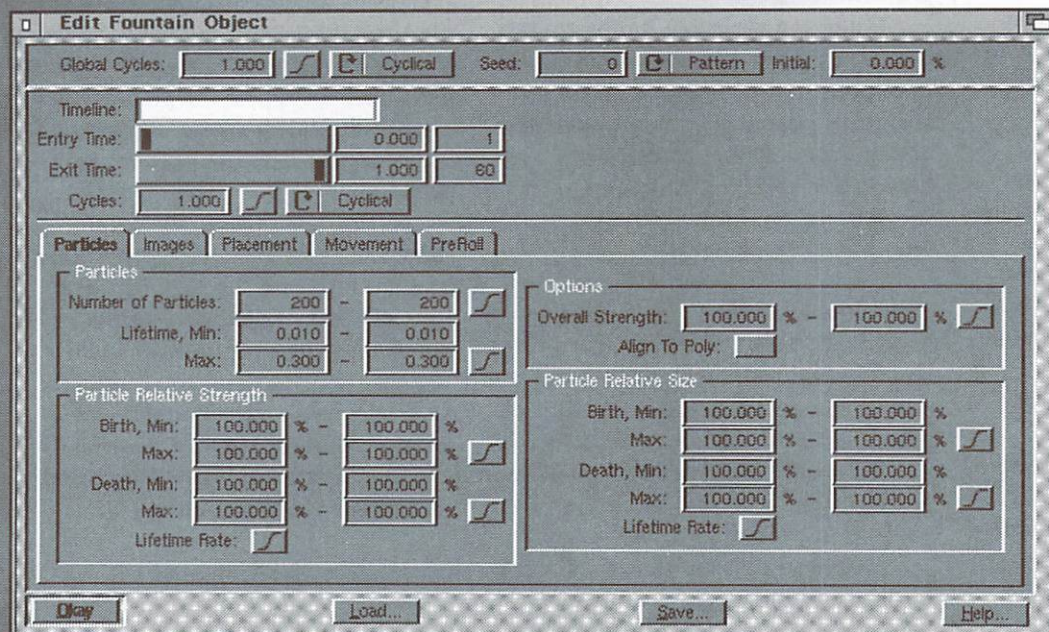


Figure 1: Fountain, Particles

A Thousand Pointy Lights

Aladdin had a very powerful implementation of a particle system. Particles are point like beings that can be created in swarms to simulate all sorts of interesting and useful phenomenon, such as swirling dust, confetti, or in our case, sparks from a cutting torch.

Aladdin calls its particle system fountains, and these fountains have a rich set of options, so rich they can be a little overwhelming at first. For our torch, we want the sparks to shoot out from the point where the beam of the

torch intersects the plate of metal it is cutting. These sparks should move mostly downward, but spread out a little as they move.

Our Attack

Start up Aladdin and load the Torch scene you have created so far. For now, create a new space to work in, so we can work on the fountain unobstructed. Once we get the sparks flying, we will move the fountain to the correct place with the torch object.

Select fountain, new from the object menu. The Edit Fountain requester has a gazillion settings, but luckily we can ignore many of them since the default settings will work. Take a look at the Particles area under Particles Tab. The first item is number of particles. This is the overall number of particles with which you want to work. As with most Aladdin items, there are entry and exit settings. In this case, 200 particles for entry and exit should be plenty. For the rest of the options in this Particles Tab, leave them set at the default.

The Lifetime min and max settings are how long the particles will be "on", as a percentage of the overall existence of the fountain. This is expressed as a minimum and maximum. Particles are born, live for awhile, and then die. We can leave the default settings for our sparks. See Figure 1.

Under the Images Tab, again we can leave most of the settings at the default. Aladdin uses Bitmaps to provide the look of the particle, and these settings define how the bitmaps are applied to the particles. Note that sizing should usually be relative. If sizing is fixed, the bitmap width and height percentage are sized according to the screen. Relative means the width and height percentage is related to the Relative Distance. You might want to click the obscurable box, lower right hand. This will hide the particles that are behind objects in the scene. See Figure 2.

Next is the Placement Tab. In the Particle Distance from Origin, the particles appear some distance from the origin of the fountain and disappear after they have moved a certain distance. In our case, the default values of 0 for birth min and

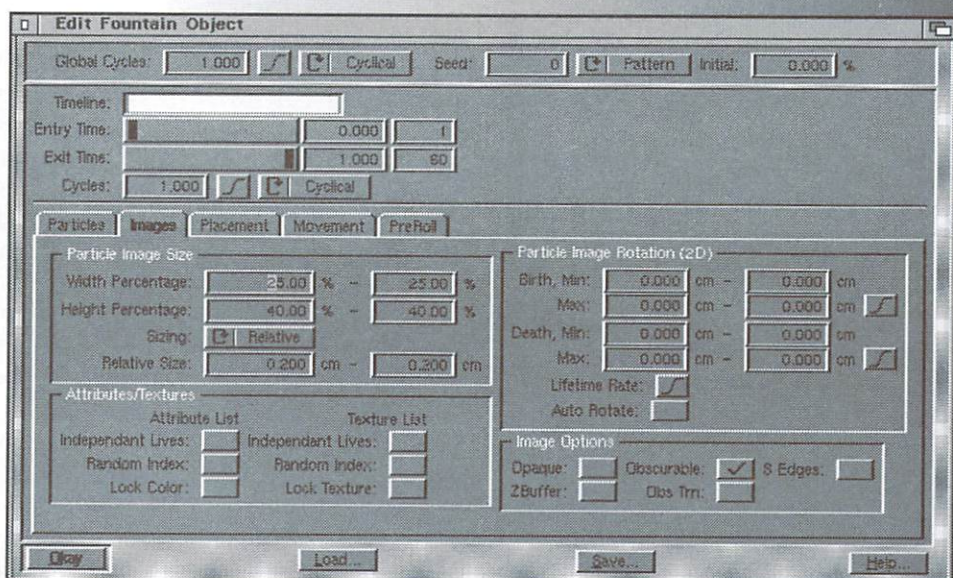


Figure 2: Fountain, Images

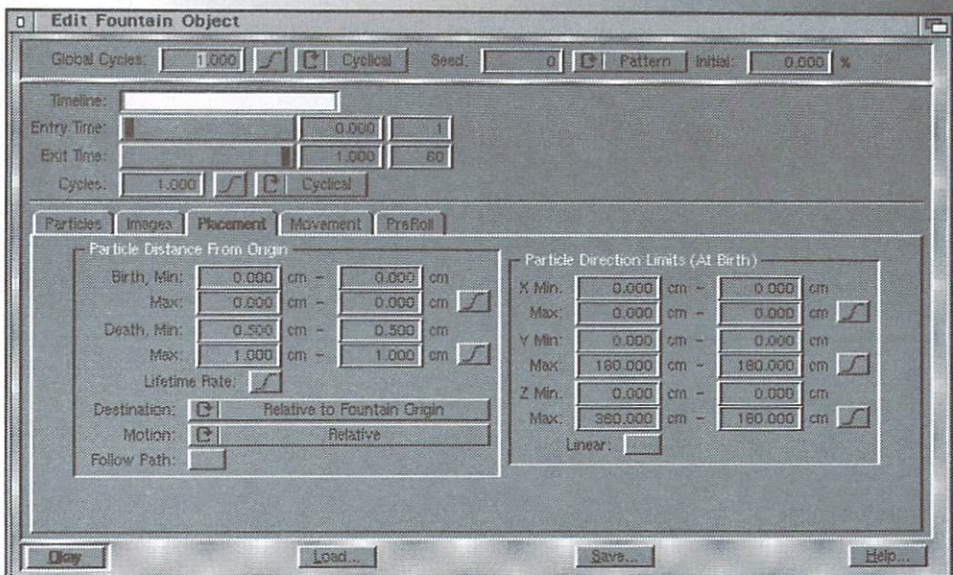


Figure 3: Fountain, Placement

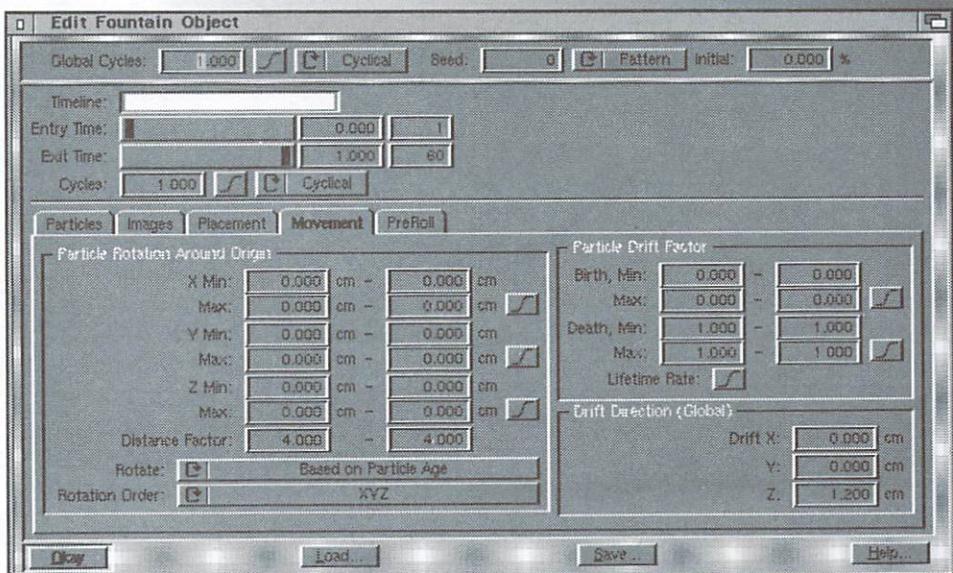


Figure 4: Fountain, Movement

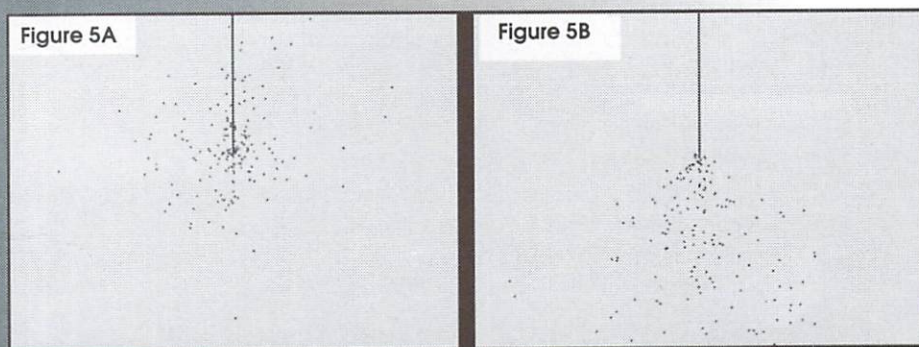


Figure 5: Different Z Drift values (please note, this image has been reversed to provide a clearer image in print).

max, and 0.5 for death min, 1.0 for death max are what we want. What this means is all the particles start at the origin, and die off somewhere between 0.5 and 1.0 units from the origin.

The Particle Direction Limits (at birth) area lets you specify the limits to the initial direction in which the particles will move off from the origin. We will just use the default values of 0 degrees for the X min and max, 0 for the Y min and 180 for the Y Max, and 0 for the Z

min and 360 degrees for the Z max. It bothered me at first that the Z axis was a maximum of 360, while the Y axis was only 180, and X was 0. It didn't seem like all the angles were being covered, in fact, it seemed unfair! But since the Z specifies any initial direction around the Z axis (hence any direction in the horizontal plane), 180 degrees is enough to cover the vertical direction. And poor X is completely redundant! In any case, we'll just leave these at the default. See Fig.3.

Next comes the movement Tab. This is the exciting part, because we want to actually change some values here in order to get the sparks to fall from the torch. In particular, we are interested in the particle drift factor and drift direction. The drift is used to simulate forces on the particles, like wind or gravity. Since we want the sparks to fall from the cutting torch, we will need to set a positive Z drift. I left the Drift factor at the defaults of 0.0 for the particle birth min and max, and 1.0 for the death min and max. This means the drift will increase from no drift when the particle is created to full drift at the death. I set the drift direction to 1.2 units. Note that this is actually a distance along a direction, small values will produce a lazy kind of spread out drift, while large values will give a more forceful compact stream. Experiment with these values till you get the effect you want. See Figure 4 for the requester. Figure 5A shows a Global Drift direction of 0.0 in all

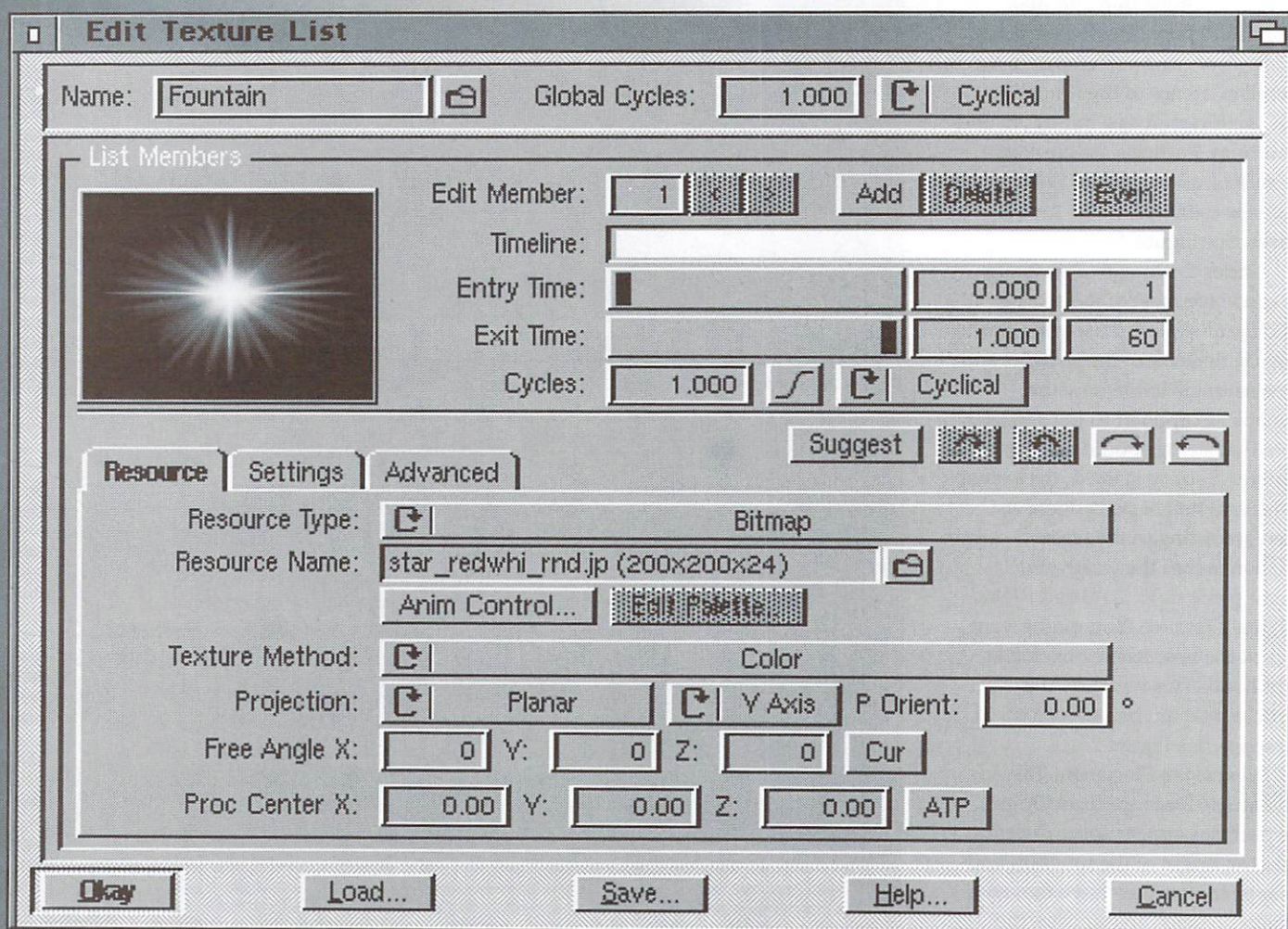


Figure 6: Fountain Texture

directions, while Figure 5B shows the results of a drift direction of 1.2 in the Z.

I set the drift direction to 1.2 units. Note that this is actually a distance along a direction, small values will produce a lazy kind of spread out drift, while large values will give a more forceful compact stream. Experiment with these values till you get the effect you want. See Figure 4 for the requester.

Preroll is for setting up a fountain before the actual animation starts, sort of "we now join this program, already in progress..." We can ignore this for our purposes.

Click on Okay to accept these settings. You will see a vertical white line in the Aladdin editor. The top of the line is the handle, while the bottom point is the business end, where the particles actually appear. Click on the fountain, and give it a yellowish white color using the attribute menu.

Now comes the fun part. In order to define the look of the particle, you texture it with a bitmap. Aladdin comes with a large set of bitmaps for this purpose, found in the Textures/flares directory. You can use any one you like, or draw your own in any paint program. I used the star_redwhi_rnd.jp image, for a nice looking spark. Set the strength and color to full. Click Okay. See Figure 6 for the Fountain texture requester.

Try a test render. If it looks O.K., move the fountain to the space with your torch, and position it so the bottom of the fountain is underneath the torch.

We can also add a flare to the picture, where the beam cuts the metal plate. Under the Objects menu, choose Flare/New. In the requester, set the Width and Height percentage. I used 80 percent on Width and height, but your mileage may vary, depending on the size of your flare and the size of the bitmap. Like fountains, flares use bitmaps to define their look. In fact, fountains are really just flares run amok. For the relative size, I chose 1.0 units, but again, you will have to play around to get the look you want.

You can have your flare rotate. Note that there is only one axis of rotation here. This treats your flare like a pin-wheel, as if you stuck a pin in the center of your bitmap and twirled it.

You can also set the X and Y offset if



Figure 8: The Torch, sparks and all

you want to scoot the bitmap around on the flare. For this flare, we will just ignore the other options and click Okay. See Figure 7 for the Flare requester.

Give the flare an orangish color using the attributes, and use the Texture attribute to select a bitmap from the

textures/flares directory. See Figure 8 for the results of all this.

O.K., we are just about done. Next issue, I will wrap up this project with the animation bits. Until then, you can contact me via email at: dsmatthews@geocities.com

•AC•

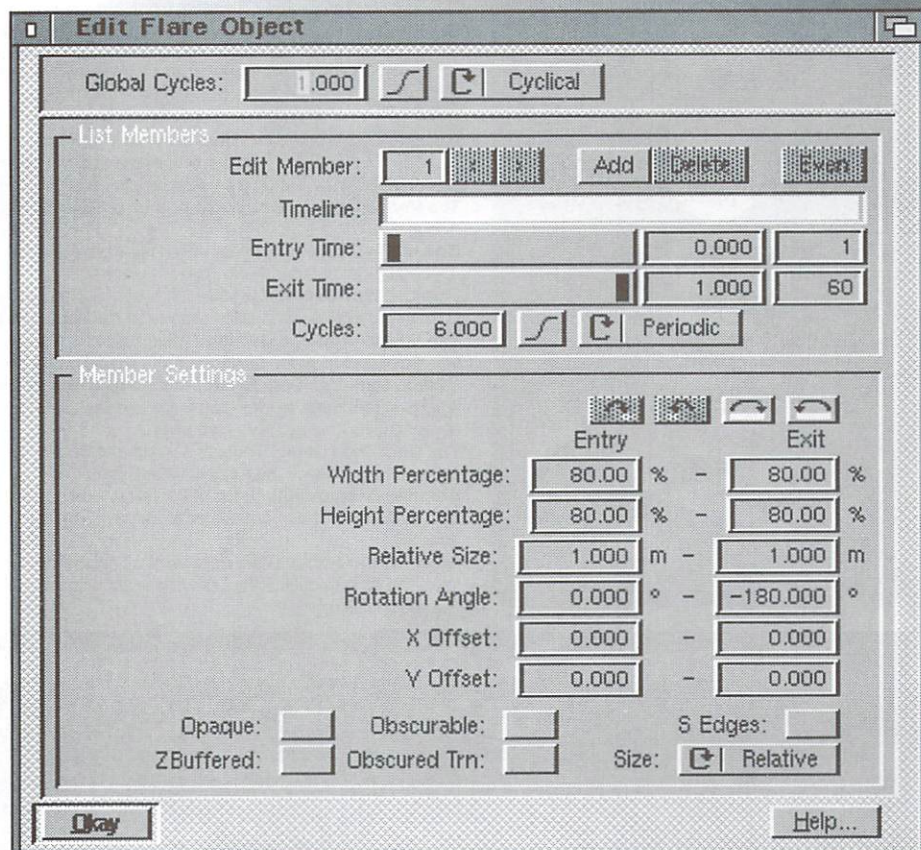


Figure 7: The Flare requester

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January/February 1999 You can't miss this one!



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On Reflection, Creating the effect of text at sea, by Nick Cook.

Aladdin 4D: Modeling a Gaseous Torch, Gases are a necessary part of almost any realistic art project, by Dave Matthews.

Micronik External Scandoubler, Scandoublers have opened up a whole new world of display options to the Amiga user, by Jake Frederick.

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Amiga Displays: The Quick and No Nonsense Guide to Amiga Monitors, Formats, questions, and problems involving various potential Amiga monitors, by Bohdan Lechnowsky.

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This Old Workbench Episode 25, VincED goes much further than your average CLI spruce up, by Dave Matthews.

How to HTML: Part 1, ANYONE can learn HTML, by Ralph Stark.

More with the Unix Shell, Using Pipes to get your data where you want it, by Antonello De Santis.

Amiga Games, Quake PPC shot down, Wipeout 2097, Quake 2, and Settlers 2 are coming soon, by Jake Frederick.

Napalm Demo, "This game looks Awesome.", by Lars Nelson.

Two for the Road - Max Rally, Two reviews on one hot product, by Jake Frederick & Jeremy Campbell.

Playing with NewTek, The Informers' "Bandito" offers his latest insights on the pitfalls of the Amiga market, by Soothsayer.

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Cologne Computer '98 & More!



VOLUME 13, # 12: DECEMBER 1998

New Products & other Neat Stuff, Free tape from Nova, Genesis Flyer, Amiga 99, The Holy Trinity, AmigaWrite1.1, Two new German mags, and more.

A Letter from Amiga Inc., Jeff Schindler on Dreams and Reality.

Wildfire Animation Sequencer Version 7 Preview, The new upgrade for Wildfire is a major upgrade offering a new, streamline interface with tabs to access all of Wildfire's features, Review by Dave Matthews.

Urban Constructs, Indulge yourself by creating the world the way you would want it to be, by R. Shamms Mortier.

Three Ways to Emphasize Photographs, Frames do more than just surround a painting or photograph, they set the stage and prepare the audience for the

presentation. Why not do the same for your next masterpiece of desktop publishing?, by Nick Cook.

The Perfect Mix..., Applying audio mixing basics to a range of situations on the Amiga, by Roger Angus.

On Line, We will end the year with a bit of JavaScript that shows you how to display different Web pages depending on the time of day, by Rob Hays.

This Old Workbench, Episode 24, A hodgepodge of items, one intended to pretty up the workbench and some font cross compatibility goodies for the Amiga with True Type and Postscript fonts, by Dave Matthews.

The Future of Amiga Gaming, The Amiga has some great games ahead, but, if you plan to play them, you may need to *game up* your current Amiga to the new higher standards, by Jake Frederick.

REBOL Uprising: Carl Sassenrath's New Programming Language, REBOL is intended to be a language that mere mortals can learn and use, and to that end, REBOL has a simple and straightforward approach, Review by Dave Matthews.

The Unix Shell Game, There is a world of versatility in the Unix language, as long as you know what to ask and how to ask it, by Antonello De Santis.

Cologne Computer'98, Some of the latest releases from the World's largest Amiga event.

Amiga & QNX, The announcement we have all been waiting for left the Amiga marketplace in a quandry.

Dr. Allan Havemose, Vice President of Engineering at Amiga Inc on Amiga OS5, Dr. Havemose takes the time to outline the OS5, the importance of QNX's contribution, and the status of the Amiga Classic's OS3.5.

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VOLUME 13, #11: NOVEMBER 1998

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Amiga OS3.5, Amiga Inc.'s MAE announcement.

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SPEED IT UP!, Add zip to your clip art. Rev up your images with tricks from ImageFX, by Nick Cook.

Aladdin 4D Cutting Torch Animation Project, Part 4: It's time to add grit to our model and create a look of wear and tear, by Dave Matthews.

On Line, JavaScript can deliver a history of activity and Miami has been updated to version 3.0d to fix some user lock up problems, by Rob Hays.

This Old Workbench: Episode 23: Corrections and Refinements, This is a

short detour to correct a few sharp turns and return us to our goal - the perfect workbench, by Dave Matthews.

Unix on the Amiga, Part 6: System administration: privileges and security, managing hard drive space and more, by Antonello De Santis.

PC Ports, The Amiga gaming scene has improved with an array of games whose coding has been ported to the Amiga, by Jake Frederick.

Midwest Amiga Expo, This Amicon event has expanded consistently and surprisingly over the past two years. See who was there!

Amiga Audio, Looking beyond recording on the Amiga to microphone placement, mixing techniques, and how to take a Soundcraft desk apart and put it back together, by Roger Angus.

Internet Bargains, We asked a group of retailers and mail order advertisers to show us their best deal to connect your Amiga to the Internet. See what they offered in their own words!

Feel Lost?

Miss The October Issue?



VOLUME 13, Number 10: October, 1998

New Products & other neat stuff, Compuquick has a new A1200 special, don't miss AmigaFest 98 in Australia, Genesis Alpha, New Boing Mat, Siamese price cuts, A4000 shortage continues, two European Amiga mags halt production, and more!

Translate AVIs to Anims, AVI, QuickTime and more are not just alternative platform formats, they are also great resources. MainActor from Main Concepts offers Amiga artists an acceptable route to produce and build projects with Amigas, PCs and, eventually, Macs, by R. Shamms Mortier.

Aladdin4D: Cutting Torch Animation Project, Part 3: Surfacing the torch head by Dave Matthews.

LightROM#6 from Graphic Detail Inc., This four CD-ROM collection will please LightWave users on all platforms, by R. Shamms Mortier.

Etched in Stone, How to create an engraved effect with type, by Nick Cook.

This Old Workbench: Episode 22 Go for Launch, Your Amiga can cut through the jargon and launch your programs through a number of different methods. This month we will study Stefan Becker's ToolManager, by Dave Matthews.

On Line, New JavaScript tricks, and update information, by Rob Hays.

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This Old Workbench: Episode 26

Building the Perfect Workbench, Part Eight

Your assignment, should you choose to accept it. Making sense of some of the most important and least noticeable commands in your Amiga CLI

By Dave Matthews

Handling Assigns

Assigns on the Amiga are a way of putting a friendly face on the business of accessing storage devices. Basically, an assign is a shortcut, meant to make a

long unwieldy pathname into a more easily remembered nickname. In other words, an assign can reduce the phrase, "Work:Programs/Graphics/NovaDesign/Where/the/heck/am/i/

oh/yeah/ImageFX3" to a simple "ImageFX." From this example, we can deduce that 1) assigns can be very useful, and 2) apparently, writing this column has adversely affected my sanity.

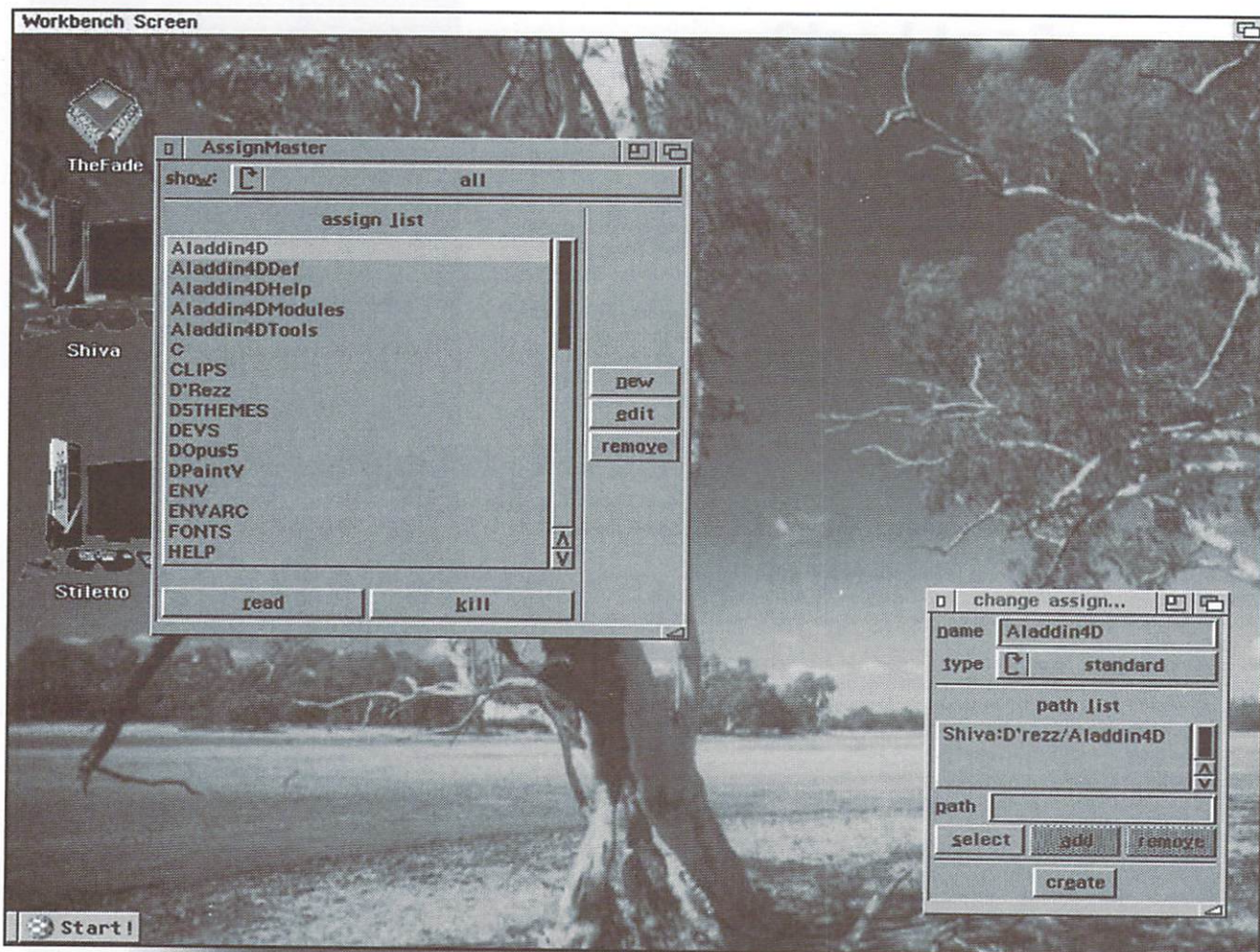


Figure 2: Assign Master

If you take a look at your Startup-Sequence file, in the the S drawer of your sys: partition, you will find the original system assigns:

```
Assign >NIL: ENV: RAM:ENV
Assign >NIL: T: RAM:T
Assign >NIL: CLIPS: RAM:Clipboards
Assign >NIL: REXX: S:
Assign >NIL: PRINTERS: DEVS:Printers
Assign >NIL: KEYMAPS:
DEVS:Keymaps
Assign >NIL: LOCALE: SYS:Locale
Assign >NIL: LIBS: SYS:Classes ADD
Assign >NIL: HELP: LOCALE:Help
DEFER
```

These assigns set up some important directories, but the main OS assigns are not explicitly listed here. SYS:, C:, S:, L:, LIBS:, and DEVS: are 'internal' assigns already in place before the assigns listed in the Startup-Sequence execute.

Note the funny looking >NIL: thing in all the assign statements. The '>' is the redirection operator. This is used to tell a command where to send its output. NIL: is yet another system assign. This is the Amiga's version of 'Talk to the hand'. Any text, error messages etc., the command might want to print are sent off to oblivion. Normally you only use this in scripts, when you don't want output to disrupt the script.

So, Assigns are pretty darn handy, but unfortunately, they aren't perfect. One problem is sometimes you are in the middle of a program, saving your data, when you realize you forgot to make a needed assign. Or a program can't load a file because you moved a directory. Then you get a 'Please insert volume so and so'. Not very helpful. While most times you can open a shell and type in the Assign, it isn't very convenient.

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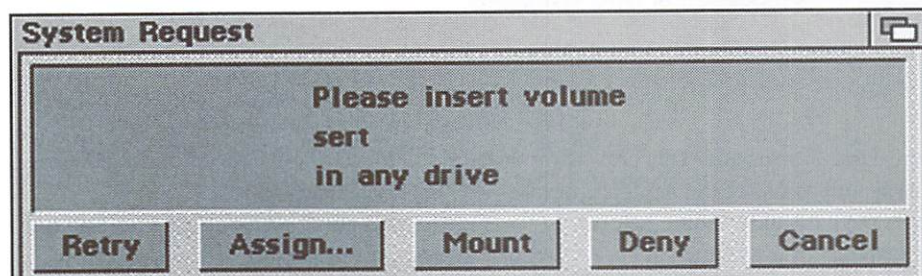


Figure 1: MultiCX AssignWedge Request

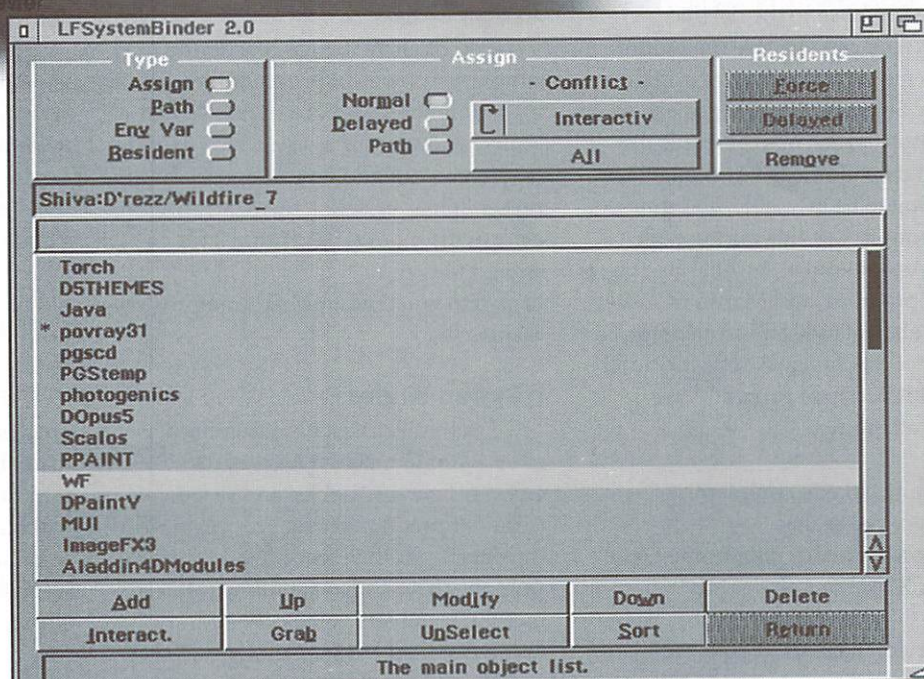


Figure 3: LF System Binder

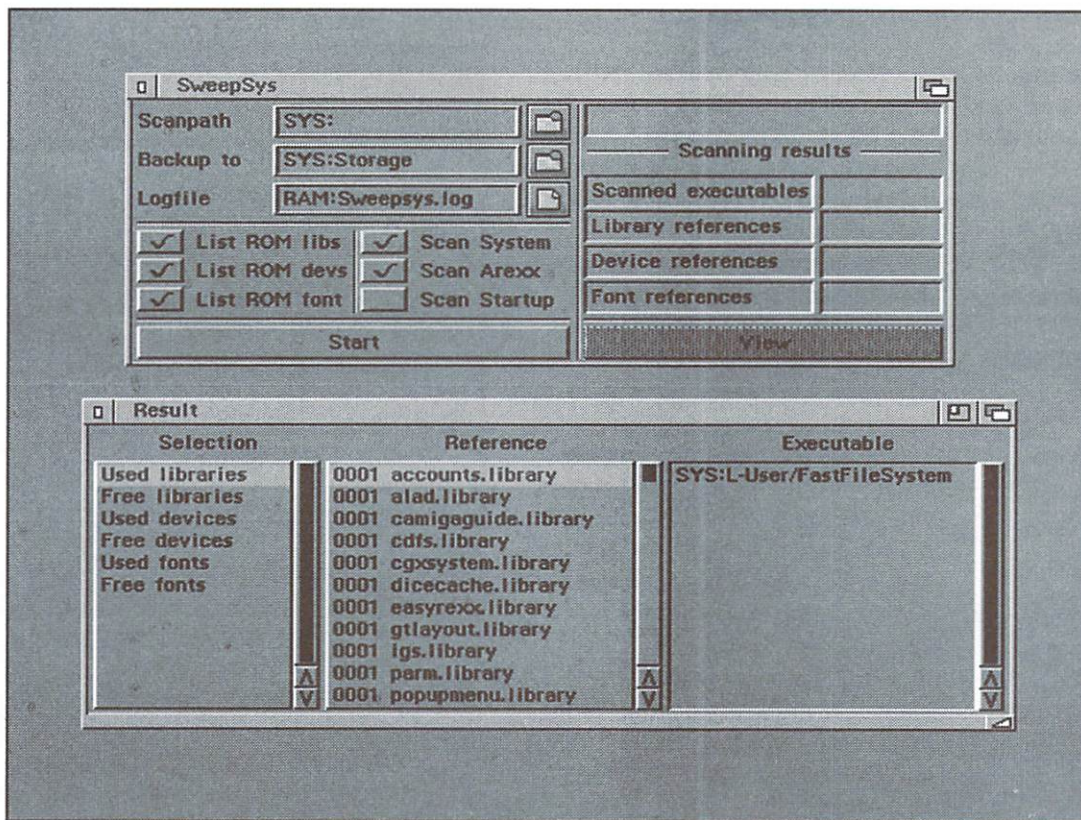


Figure 4: SweepSys

An AssignWedge

Enter a utility known as an assign wedge. This is a system utility that presents you with a more usable requester. You can click on the Assign button and browse to the desired directory. You can also use the mount button to mount a device, like a Zip or CD drive. Some AssignWedges have a Deny button, which basically tells the system that a volume is not available, is never going to be available, and quit crying about it. Use this button with caution. AssignWedge, by Olaf Barthel, is one such program, and Martin Berndt's MultiCX also includes this function. See Figure 1 for the AssignWedge included with MultiCX. These programs are available at Aminet:

<http://ftp.wustl.edu/pub/aminet/util/wb/AssignWedge.lha>

<http://ftp.wustl.edu/pub/aminet/util/cdity/MCX280.lha>

After you have used your Amiga for awhile, you will find you have collected quite a pile of Assigns, usually found in

your User-Startup file. This can get pretty messy, but as usual, the Amiga programmers have provided some helpful solutions.

Assign Master

Peter Palm's Assign Master is a simple yet powerful program for managing those pesky assigns. Assign Master shows your assigns in a GUI, where you can add new assigns, edit the present ones, or delete them, all with the click of the mouse. See Figure 2 for Assign Master.

<http://ftp.wustl.edu/pub/aminet/util/wb/assmas.lha>

LFSytemBinder

Laurent Faillie's LFSytemBinder allows you to manage Assign, Path, environmental variables and Residents (resident programs hang around in RAM, thus are faster than loading and running from the drive). LFSytemBinder has a nice GUI, and lets you easily add, remove and edit system assigns, as well as Path, environmental variables and residents. There is also an interactive

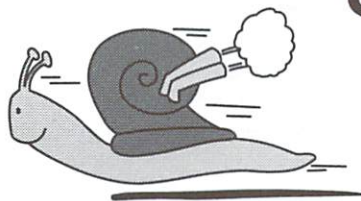
mode for on-the-fly assigning. See Figure 3 for LFSytemBinder.

<http://ftp.wustl.edu/pub/aminet/util/wb/lfsystem.lha>

Spring Cleaning

Finally, one last must-have program is Frank Fenn's SweepSys. This program scans your hard drive, and reports on system files (libraries, Devices, Fonts) in use. It not only lists the files, it tells you what program is using a particular file. This is quite handy in order to keep your system from filling up with deadwood, old libraries, fonts etc., that you no longer need. See Figure 4 for SweepSys.

Well, that's it for this episode. As always, you can contact me via email at dsmatthews@geocities.com. Note that I may take awhile to answer. I'm trying to do better about that. I'm also still slowly updating my This Old Workbench website at www.geocities.com/siliconvalley/hills/2359.



UNIX: Shell Programming

Exceeding limitations

Open yourself up to a more rewarding Amiga experience.

by Antonello De Santis

Shell Programming

After an introduction to Unix shells, it's time to cover shell programming. Every Unix user, particularly system administrators, needs at least a minimal basis of programming. Programming knowledge is very useful both for automating operations and making it easier to understand the source code of important system shell scripts such as `startx` or `rc` and `rc.local`. I always found it very frustrating accepting the configuration files of an operating system as "God given" and not being able to modify them according to my needs.

Understanding the basis of programming will give you the chance to customize every aspect of your Unix OS and be more productive. In this article I want to cover some general aspects of shell programming and I will also explain some extra features provided by the `bash` shell. Hopefully, this introduction will be useful to all of you who want to learn more and wish to switch to another language such as Perl or C.

Introduction to programming: variables

Let's start with a basic programming concept, the so-called "variable". Variables are containers of data; they contain data on which a program must operate. You can consider a wardrobe as a variable and clothes as data. Variables are the fundamental programming tool; without them you would not be able to create significant programs. The usual operator to assign a value to a variable is `=`. For example:

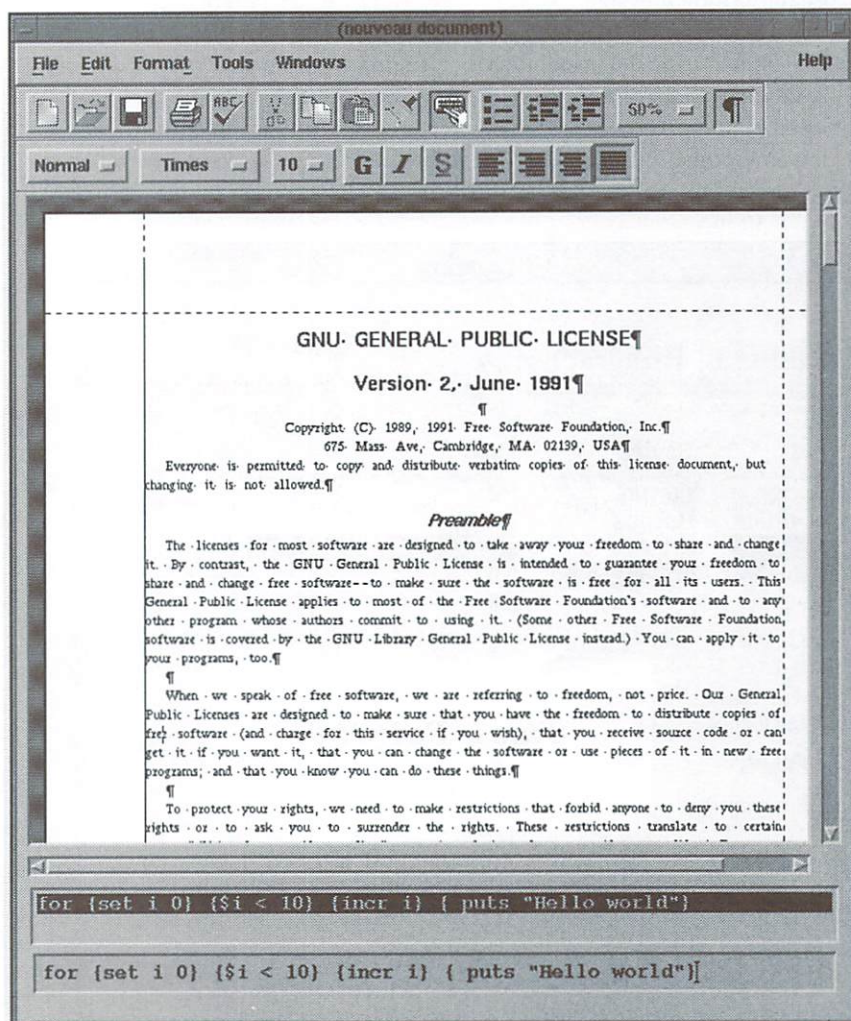
```
$ a=10
```

This instruction would "put" the integer number "10" in variable "a".

There is a particular category of variables under Unix, as well as under Amiga OS: environment variables. This kind of variable is often needed by the programs you use, even if you were not aware. An environment variable usually

contains some information needed by a program in order to work properly.

For example, a mail program could require the existence of an environment variable called `HOMEDIR`, where you should write the path of your own home directory, or a variable called `EDITOR` that contains the name of the editor you



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want to use for writing messages. Most programs set environment variables with a reasonable value during the installation process, so the user doesn't have to worry about that in the future. For example the environment variable

EDITOR could be set to `"/usr/bin/vi"` or `"/usr/local/bin/emacs"`.

The latter was a "friendly" definition of environment variable. A more formal definition requires some more information about shells' functioning.

When you log onto a Unix machine, a default shell is automatically run so you can launch the programs you want. You can execute programs as well as shell scripts. If you run a shell script, it will transparently open a new shell, the daughter of the shell that ran it. This procedure can be repeated several times if a shell script executes other shell scripts. Every subshell so generated will be the daughter of the shell that has run it. This kind of structure is called "tree", where the first shell launched is the root of the tree and the other shells are root's daughters, nieces and so on.

We can now see the real definition of environment variable. A variable is an environment variable if and only if it can be read by every parent and daughter shell of the shell that has created it. A generic variable can only be accessed by programs launched by the shell that created it; an environment variable, however, can be accessed by every shell

in the same tree as the shell generated the variable.

A generic variable can be created in just one step:

```
$ a=10
```

Integer number "10" is put in variable "a".

An environment variable can be created in one or two steps instead. In two steps:

```
$ a=10
```

```
$ export a
```

The first instruction again puts integer number "10" in variable "a". The second instruction makes variable "a" readable by every shell in the same tree as the shell that created variable "a"; It makes "a" an environment variable.

In one step:

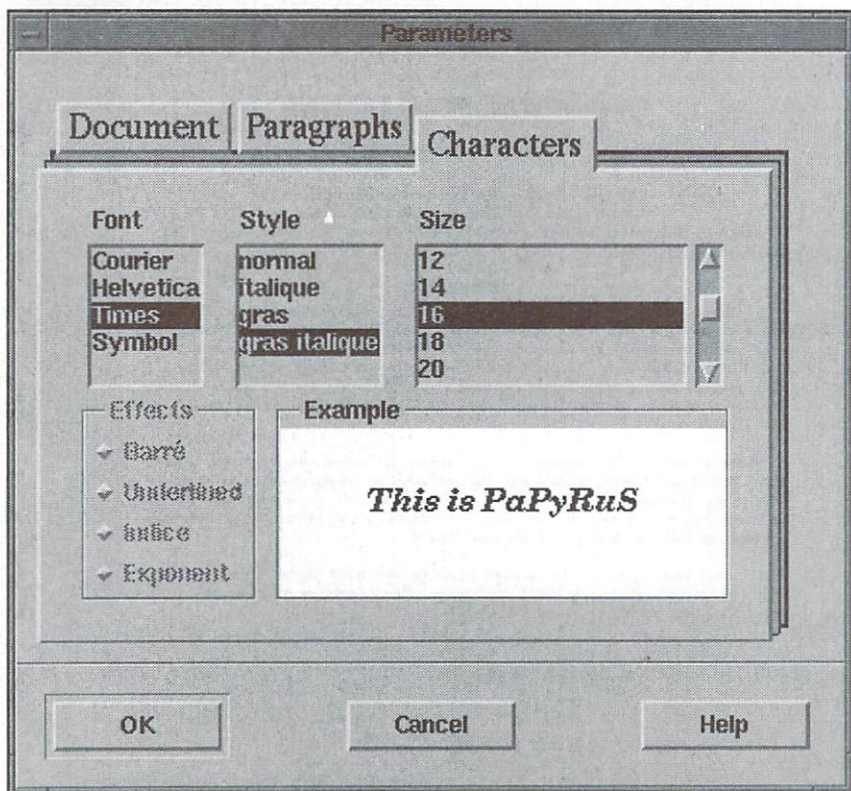
```
$ setenv a 10
```

This instruction directly creates an environment variable called "a" and puts integer number "10" in it.

Instruction "setenv" is not available on every Unix OS (or example, it is available in NetBSD but not in Linux) so it is better to know how to create an environment variable with command "export".

Pay attention to the fact that an environment variable can ONLY be READ by the shells in the same tree, it CAN'T be modified. Some of you, who have some programming knowledge, may have considered an environment variable as a "global" variable, but this is wrong. A global variable, in a language such as Pascal or C, is a variable that can both be read and written by every procedure in the program, an environment variable can ONLY be READ instead.

You may now wonder what happens if you create a new variable with the same name as an environment variable, in a subshell. It's simple. The variable is created, but it is placed in a different area



General parameters window.

of memory. So you would have two variables with the same name, but they are physically located in two different places in memory. A variable is just a location in main memory. We can say that variables are "abstractions" of physical memory locations. It is easier writing "a=10" than the assembly instruction "move #10, 9000".

Suppose you accomplished the following operations from the root shell:

```
$ a=10
$ export a
$ echo $a
10
$
```

Now suppose you accomplished these other operations from a subshell of the root shell:

```
$ echo $a
10
$ a=20
$ echo $a
20
$
```

Now again from the root shell:

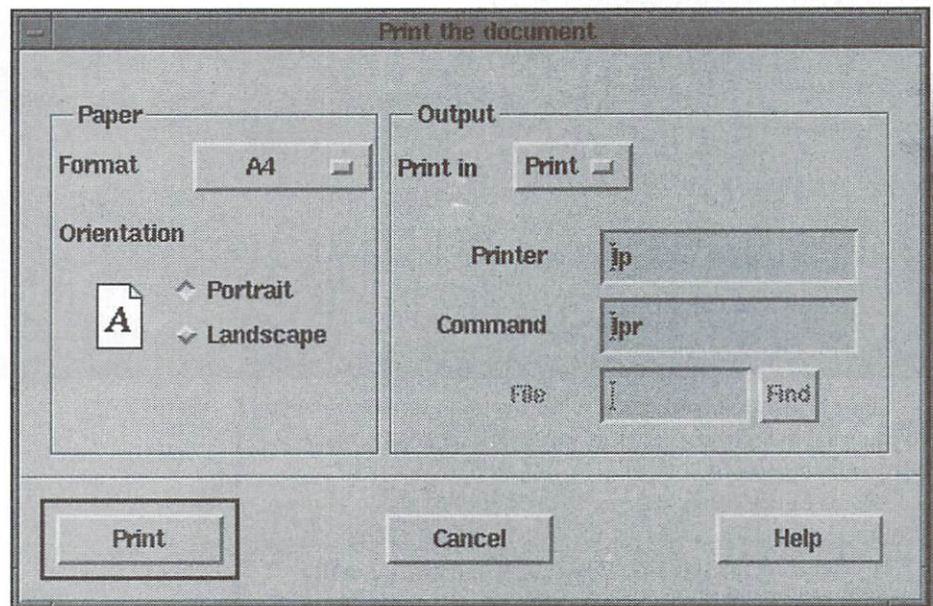
```
$ echo $a
10
$
```

Do you understand what's happened? Before explaining, let me introduce command "echo". This command is used to print a message on the standard output. Its parameter can directly be the message you want to be printed, or a variable. For example:

```
$ echo 'Amiga rulez!!!!'
Amiga rulez!!!!
$
```

If you want to print the content of a variable instead, you have to write the symbol "\$" before the name of the variable you want to be printed. Let's go back to the above examples.

In the first case you create variable "a" from the root shell and put integer number "10" in it. Then you make it an environment variable and display its content with command "echo \$a". In the second part of the example you are



Print options window.

operating from a subshell of the root shell. First, you display the content of the environment variable "a", you can accomplish this operation because environment variables can be READ by subshells.

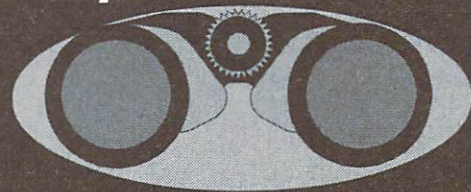
Then you create a generic variable "a", put integer number "20" in it and print its content. Now you see number "20" printed on the screen and you won't be able to access environment variable "a" anymore! You haven't deleted environment variable "a" though. Let's clarify this last point examining the last part of the example.

Now you operate again from root shell. The only instruction you type in is "echo \$a", the result, as you'll have surely thought, is "10" and not "20". This happened because even if the two variables have the same name, they are placed in two different memory locations and when you access one of the two variables the operating system is always well aware of which one you want to access. We can be confused, not Unix!

Next month we'll go on with other shell programming topics.

•AC•

Let everyone know
where you are looking.



Remember to say,
"I saw you in

Amazing / AMIGA
COMPUTING

How to H.T.M.L. Part 2

Lists and Menus

Make your website stand out with a few simple text manipulation secrets built into HTML.

by Ralph Stark

Part 1 was an introduction to the basics of HTML necessary to produce web pages. This part will continue and elaborate on that basic theme.

Items can be listed in several ways:

*numerical fashion, using `` & `` ("O"rdered "L"ist).

*"bulleted", using `` & `` ("U"nordered "L"ist) usually alphabetical.

Items can also be in Menu form, using `<MENU>` and `</MENU>`. Let's add this to the area, and at the same time simplify the other sizes to avoid confusion.

```
<HEAD><TITLE>This is my HTML document</TITLE></HEAD>
<BODY>
<H1><P>This is type size 1</P></H1>

<H2><P>This is type size 2</P></H2>

<H3><P>This is type size 3</P>
<P>Adding a Menu listing.</P>
<OL>
<LI>Within an ordered list.
<MENU>
<LI>menu item a.
<LI>menu item b.
</MENU>
</OL>
<UL>
<LI>Within an unordered list.
<MENU>
<LI>menu item 1.
<LI>menu item 2.
```

```
</MENU>
</UL>
</H3>
```

```
<H4><P>This is type size 4</P></H4>
```

```
<H5><P>This is type size 5</P></H5>
```

```
<H6><P>This is type size 6</P>
<P>Use care with this type size. It can be unreadable
in some cases!</P>
</H6>
<OL>
<LI>This is where we try our word wrap
capability...testing one, two, three, four, five,
six, seven, eight, nine, ten, eleven, twelve, thir-
teen, fourteen, fifteen, sixteen, seventeen, eigh-
teen, nineteen, twenty.
</OL>
</BODY>
</HTML>
```

When lists are contained within other lists they are automatically indented. When a `<Menu>` is created, the items listed within it are denoted by the "bullet" method.

It is also possible to list items with attendant definitions, using the `<DL>` and `</DL>` indicators. When using them the `<DD>` designator will denote the definition portion, which will be indented from the sample.

Note: from here on only size will be used for examples. Any other sizes necessary will be used as required.

```
<HTML>      <!-- begin HTML document -->
<HEAD><TITLE>This is my HTML document</TITLE></HEAD>
<BODY>
<H3>
<P>This is type size 3</P>
<P>Adding Menu listings.</P>
<OL>
<LI>Within an ordered list.
<MENU>
<LI>menu item a.
<LI>menu item b.
</MENU>
<LI>Now a definition inside an ordered list.
<DL>
<DT>Simple.
<DD>What HTML is.
</DL>
</OL>
<UL>
<LI>With an unordered list.
<MENU>
<LI>menu item 1.
<LI>menu item 2.
```

This is type size 1

This is type size 2

This is type size 3

Adding a Menu listing.

1. Within an ordered list.
 - o menu item a.
 - o menu item b.
- Within an unordered list.
 - o menu item 1.
 - o menu item 2.

This is type size 4

This is type size 5

This is type size 6

Use care with this type size. It can be unreadable in some cases!

1. This is where we try our word wrap capability...testing one, two, three, four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, twenty.


```

</MENU>
<LI>Now a definition inside an unordered list.
<DL>
<DT>Fun.
<DD>What creating Web pages is.
<DD>Easy.
</DL>
</UL>

</H3>
</BODY>
</HTML>      <!-- end HTML document -->

```

Last, but not least, is the comment. What would any body of work be without comments? They are done by using this: `<!-- comments -->` Note: the full comment bracketing must exist on each and every line. It is not possible to continue a comment from one line to another.

Character string formatting is somewhat limited: making a word or two bold, or changing font size or color, but not all browsers support the tags that effect these changes. Please remember that the actual appearance of any altered text is dependent on the browser in use. HTML generally is not intended to be used for any specific style element. It simply tells the browser that a particular word, or group of words, should be displayed differently.

Therefore you cannot depend that any presentation will be bold, or italic or any other specific style, only that it WILL be presented in a manner different from the other text.

"Logical style tags" are what are used for this purpose. There are eight such tags in use:

- 1) `` & ``..... Emphasize.
- 2) `` & ``..... More strongly emphasized.
- 3) `<CODE>` & `</CODE>`..... Code sample. Browser may use special font.
- 4) `<SAMP>` & `</SAMP>`..... Sample text. Similar to Code.
- 5) `<KBD>` & `</KBD>`..... Text to be typed by user.
- 6) `<VAR>` & `</VAR>`..... Variable to be replaced by user.
- 7) `<DFN>` & `</DFN>`..... Definition. Will be highlighted in some way.
- 8) `<CITE>` & `</CITE>`..... Quote or citation.

Using them in the body text and then displaying them on your browser will show you what happens. If possible, take a look at them with another type of browser.

```

<HTML>      <!-- begin HTML document -->
<HEAD><TITLE>This is my HTML document</TITLE></HEAD>
<BODY>
<H3>
<P>This is type size 3.</P>
<P>Adding Menu listings.</P>
<OL>
<LI>Within an ordered list.
<MENU>
<LI>menu item a.
<LI>menu item b.
</MENU>
<LI>Now a definition inside an ordered list.
<DL>
<DT>Simple.
<DD>What HTML is.
</DL>
</OL>
</UL>

```

This is type size 3

Adding Menu listings.

1. Within an ordered list.
 - o menu item a.
 - o menu item b.
2. Now a definition inside an ordered list.

Simple.

What HTML is.

 - With an unordered list.
 - o menu item 1.
 - o menu item 2.
 - Now a definition inside an unordered list.

Fun.

What creating Web pages is.

Easy.

```

<LI>With an unordered list.
<MENU>
<LI>menu item 1.
<LI>menu item 2.
</MENU>
<LI>Now a definition inside an unordered list.
<DL>
<DT>Fun.
<DD>What creating Web pages is.
<DD>Easy.
</DL>
</UL>
<OL>
<LI>HTML is <EM>easy</EM>.
<LI>HTML is <STRONG>easy</STRONG>.
<LI>C and C++ both use <CODE>#include</CODE>.
<LI>C and C++ both use <SAMP>English</SAMP>.
<LI>Please type <KBD>find . -name "prune" -print</KBD>.
<LI>The name for the file is <VAR>My_File</VAR>.
<LI>HTML can be defined by the word <DFN>easy</DFN>.
<LI>This will show a citation example: <CITE>Valley Forge, 1776</CITE>.
</OL>
</H3>
</BODY>
</HTML>      <!-- end HTML document -->

```

Now that you have some idea of what your browser will and will not do for text emphasis, let's look at the tools available for altering the font.

"Physical style tags" will be used to indicate specific fonts. They are:

- 1) `` & `` Bold.
- 2) `<I>` & `</I>` Italic.
- 3) `<TT>` & `</TT>`..... Monospaced typewriter font.
- 4) `<U>` & `</U>` Underline.
- 5) `<S>` & `</S>` Strikethrough.
- 6) `<BIG>` & `</BIG>` Larger than surrounding.
- 7) `<SMALL>` & `</SMALL>` ... Smaller than surrounding.
- 8) `_{` & `}` Subscript.
- 9) `^{` & `}` Superscript.

This is type size 3.

Adding Menu listings.

1. Within an ordered list.
 - o menu item a.
 - o menu item b.
2. Now a definition inside an ordered list.
Simple.
What HTML is.
 - With an unordered list.
 - o menu item 1.
 - o menu item 2.
 - Now a definition inside an unordered list.
Fun.
What creating Web pages is.
Easy.

Here are the Logical style tags.

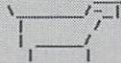
1. HTML is *easy*.
2. HTML is *easy*.
3. C and C++ both use `#include`.
4. C and C++ both use English.
5. Please type `find . -name prune -print`.
6. The name for the file is *My File*.
7. HTML can be defined by the word *easy*.
8. This will show a citation example: *Valley Forge, 1776*.

Next come the Physical style tags.

9. This is the bold tag.
10. This is the *italic* tag.
11. This is the typewriter text tag.
12. This is the underline tag.
13. This is the ~~strikethrough~~ tag.
14. This is the big tag.
15. This is the small tag.
16. This is the subscript tag. Water(H₂O) requires it.
17. This is the superscript tag. Math(X²) requires it.
18. This is both bold and *italic*.

Here are a couple of examples of pre-formatted text in size B3:

Mary had a little lamb.



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
off	work	work	work	work	work	off

Here they are in size B5:

10 chars	30 chars	50 chars	70 chars
XXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Mary had a little lamb.



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
off	work	work	work	work	work	off

will follow your format exactly. The `<PRE>` and `</PRE>` will tell the browser to use exactly the text as shown. A word of caution: carriage returns and the space bar are universally recognized. The tab key, however, can vary from browser to browser. On one it may be four spaces, on another six or eight. If your text is a table, for instance, it is better to use the space bar for separation, rather than the tab key.

Incidentally, with the `<PRE>` tag it is possible to simply insert files from other sources (e-mail, other text files) and show them as they appear.

It is a good idea to limit formatted text files to 60 characters width. It will guarantee the file appears in full width on the browser screen without the need to scroll. Watch what size text you use. Change it if necessary. `<H5>` will show 60 characters on screen. Various tags can be used within the text, but not formatting tags such as the paragraph `<P>` tag. Don't forget to set the size for the things you are showing.

A word of caution here: some of the older browsers still in use do not support all of these tags. In such a case, the browser may either make a substitution or ignore the tag entirely. Tags can be nested for added effect.

```
<HTML>      <! - - begin HTML document - - >
<HEAD><TITLE>This is my HTML document</TITLE></HEAD>
<BODY>
<H3>
<P>This is type size 3.</P>
<P>Adding Menu listings.</P>
<OL>
<LI>Within an ordered list.
<MENU>
<LI>menu item a.
<LI>menu item b.
</MENU>
<LI>Now a definition inside an ordered list.
<DL>
<DT>Simple.
<DD>What HTML is.
</DL>
</OL>
<UL>
<LI>With an unordered list.
<MENU>
<LI>menu item 1.
<LI>menu item 2.
</MENU>
<LI>Now a definition inside an unordered list.
<DL>
<DT>Fun.
<DD>What creating Web pages is.
<DD>Easy.
</DL>
</UL>
<OL>
<P>Here are the Logical style tags.</P>
<LI>HTML is <EM>easy</EM>.
<LI>HTML is <STRONG>easy</STRONG>.
<LI>C and C++ both use <CODE>#include</CODE>.
<LI>C and C++ both use <SAMP>English</SAMP>.
<LI>Please type <KBD>find . -name "prune" -print</KBD>.
<LI>The name for the file is <VAR>My_File</VAR>.
<LI>HTML can be defined by the word <DFN>easy</DFN>.
<LI>This will show a citation example: <CITE>Valley Forge, 1776</CITE>.
<P>Next come the Physical style tags.</P>
<LI>This is the <B>bold</B> tag.
<LI>This is the <I>italic</I> tag.
<LI>This is the <TT>typewriter text</TT> tag.
<LI>This is the <U>underline</U> tag.
<LI>This is the <S>strikethrough</S> tag.
<LI>This is the <BIG>big</BIG> tag.
<LI>This is the <SMALL>small</SMALL> tag.
<LI>This is the subscript tag. Water(H<SUB>2</SUB>) requires it.
<LI>This is the superscript tag. Math(X<SUP>2</SUP>) requires it.
<LI>This is both <B>bold</B> and <B><I>italic</I></B>.
</OL>
</H3>
</BODY>
</HTML>      <! - - end HTML document - - >
```

Generally speaking, the only information the browser will use about the text is the tags. The white space and blanks are stripped out. There is, however, one method of formatting that

```
<HTML>      <! - - begin HTML document - - >
```



```

<HEAD><TITLE>This is my HTML document</TITLE></HEAD>
<BODY>
<H3>
<P>This is type size 3.</P>
<P>Adding Menu listings.</P>
<OL>
<LI>Within an ordered list.
<MENU>
<LI>menu item a.
<LI>menu item b.
</MENU>
<LI>Now a definition inside an ordered list.
<DL>
<DT>Simple.
<DD>What HTML is.
</DL>
</OL>
<UL>
<LI>With an unordered list.
<MENU>
<LI>menu item 1.
<LI>menu item 2.
</MENU>
<LI>Now a definition inside an unordered list.
<DL>
<DT>Fun.
<DD>What creating Web pages is.
<DD>Easy.
</DL>
</UL>
<OL>
<P>Here are the Logical style tags.</P>
<LI>HTML is <EM>easy</EM>.
<LI>HTML is <STRONG>easy</STRONG>.
<LI>C and C++ both use <CODE>#include</CODE>.
<LI>C and C++ both use <SAMP>Enlish</SAMP>.
<LI>Please type <KBD>find . -name "prune" -print</KBD>.
<LI>The name for the file is <VAR>My_File</VAR>.
<LI>HTML can be defined by the word <DFN>easy</DFN>.
<LI>This will show a citation example: <CITE>Valley Forge, 1776</CITE>.
<P>Next come the Physical style tags.</P>
<LI>This is the <B>bold</B> tag.
<LI>This is the <I>italic</I> tag.
<LI>This is the <TT>typewriter text</TT> tag.
<LI>This is the <U>underline</U> tag.
<LI>This is the <S>strikethrough</S> tag.
<LI>This is the <BIG>big</BIG> tag.
<LI>This is the <SMALL>small</SMALL> tag.
<LI>This is the subscript tag. Water(H<SUB>2</SUB></SUB>O) requires it.
<LI>This is the superscript tag. Math(X<SUP>2</SUP></SUP>) requires it.
<LI>This is both <B>bold</B> and <B><I>italic</I></B>.
</OL>
<H3>
<PRE>

```

Here are a couple of examples of pre-formatted text in size H3:

Mary had a little lamb.

```

\_____/
|      |
|      |
|_____|

```

```

<U>Sunday Monday Tuesday Wednesday Thursday
Friday Saturday</U>
off work work work work

```

pantheon
web sites
hosting
market research
e-commerce
full service internet marketing
(440) 353-WEB-2

**hosting...
market research...
web development...
full-service!**

call pantheon today to get signed up for web hosting starting at just 5 bucks a month.

call pantheon to figure out if your web site can help you reach your goals.

call pantheon to get serious about your success on the Internet.

your online success matters to pantheon, the firm behind www.amiga.com and www.gageproducts.com.

serious about online business success? call us.

```

work off
</PRE>
</H3>
<H5>
<PRE>
Here they are in size H5:
10 chars 30 chars 50 chars
70 chars
xxxxxxxxxx 20 chars xxxxxxxxxxxx 40 chars xxxxxxxxxxxx
60 chars
xxxxxxxxxx (5)
xxxxxxxxxx xxxxxxxxxxxx xxxxxxxxxxxx
xxxxxx

```

Mary had a little lamb.

```

\_____/
|      |
|      |
|_____|

```

```

<U>Sunday Monday Tuesday Wednesday Thursday
Friday Saturday</U>
off work work work work
work off
</PRE>
</H5>
</BODY>
</HTML> <!-- end HTML document -->

```

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Linux

Linux Red Hat 5.1

By Ted Wallingford



Linux, the free operating system created by University of Helsinki student Linus Torvalds in 1994, has gained immense popularity on many platforms, including the Amiga. Linux has many advantages over the Amiga OS, including multi-user capability, real memory management, and very good worldwide support. Almost all Linux programs are source-compatible, which makes it easier to port Linux software from one hardware platform to another. But, until now, there has not been a friendly method of obtaining and installing this open source Unix derivative on the Amiga.

graphical user environment (called X11), a 68060 with a video card is best. Serious X11 users should consider the PowerPC port of Linux, which, unfortunately, is not available on the Schatztruhe CD.

In order to install Red Hat 5.1 Linux on the Amiga, the user must first build a set of two setup diskettes using a utility included on the CD. The first setup diskette will boot the Amiga into Red Hat's setup utility, which helps you determine which method you would like to use to install the OS. There are several ways to install, including from the CD-ROM, by downloading the installation files from an FTP site, or by copying

lan-

guages, Washington University FTP server, a C/C++ compiler, a BASIC interpreter, and several games.

Schatztruhe also included Ron Flory's excellent installation guide in web-page format. I recommend printing it out or having it on a second machine to reference during the installation. This guide can save you from common installation pitfalls. For

Red Hat Linux 5.1, as sold by Schatztruhe, is nearly identical to Red Hat Software's Amiga distribution on the Red Hat Rough Cuts CD-ROM. However, Red Hat does not support any software included with Rough Cuts.

Fortunately, Schatztruhe of Germany, has made Linux available on CD-ROM for the Amiga and it includes interactive installation utilities and web-based documentation. This distribution of the Linux OS is a port of the excellent Red Hat 5.1 distribution, mostly used on Intel-based PCs. The best feature of Red Hat Linux is its intuitive installation routine, which eliminates the need for manually unpacking large Linux archives and modifying cryptic hard disk partition parameters.

Linux Red Hat 5.1 requires a 68020 or higher processor with a memory management unit (MMU), four megabytes of RAM, 2.04 or higher Amiga ROMs, and about 100MB hard disk space. While a 68040 processor with 16MB RAM is adequate to run Red Hat's included

them from an NFS (network file system) server. If you install using FTP or NFS, the second diskette is used to fire up the networking system so that you can transfer files from a site on the Internet. Since the files needed for the installation are very large, FTP and NFS installs are usually only suited to users with very fast, permanent Internet connections.

The setup utility allows you to select which software packages you would like to install. Red Hat Linux includes a vast assortment of software, including server programs and applications. Using Linux on an Amiga, you could build a Unix workstation, a web server, or even a firewall to protect your network from the Internet.

Besides the graphical environment, the Red Hat setup utility also allows you to install the acclaimed Apache web server, several web browsers, several e-mail clients, Perl and TCL scripting

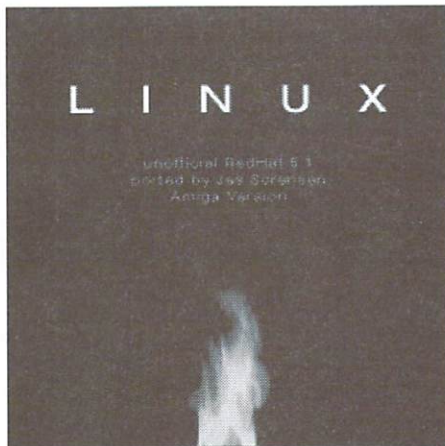
the latest revision of this guide, point your web browser to <http://www.feist.com/~rjflory>.

The Amiga version of Red Hat 5.1 Linux offers driver support for the Hydra, Ariadne, and Commodore ethernet cards and all built-in hard disk controllers. More drivers for third party equipment are actively being developed by Jes Sorensen and his global team of Amiga Linux programmers. During the installation, the setup utility should detect all supported hardware automatically.

Since Linux cannot be used to run Amiga software, you may wish to leave your Amiga disk partitions in tact so that you can boot the Amiga OS after installing Linux. Using the setup utility's drive partition utility, you can specify that you want to keep your original Amiga FFS partitions, as long as there is enough unused hard disk space to create a

capable Linux boot partition and virtual memory partition. The Schatztruhe Linux CD includes an Amiga program which will boot Linux from a shell script or icon on the Amiga Workbench.

The setup utility can be used to install lots of file system support, too. You can allow Linux to read your existing Amiga FFS partitions and floppy disks. This is useful if there's data on your Amiga partitions that you would like to use in Linux. It is also useful if your Linux setup automatically boots from the Amiga OS when the computer boots and something in an Amiga startup file (like `s:startup-sequence`) needs to be changed before the next boot.



Once the setup utility has copied all the files onto your Amiga's hard disk, you must establish your "root" password. The root user account and password allow you to add user accounts and set file permissions on your Amiga Linux workstation. In this fashion, you can share access to your computer from the network or the Internet to other users. Thousands of user accounts can exist on your Linux-based Amiga, all with separate security policies.

When the system boots into Linux for the first time after completion of the setup process, you will be presented with a login prompt. Log into the system as root, set up a user account for yourself, and the installation is finished.

Linux is a fabulous option for Amiga computers. It is constantly being developed, which makes it an instant answer

for the legions of Amiga users waiting patiently for Amiga OS 3.5. It gives classic Amiga hardware a new lease on life, bringing the Amiga computer's networking and application options up to par with high-end Unix workstations from Sun or Silicon Graphics.

A Linux Amiga can be used as a file server for Amiga OS, Mac OS, and Windows workgroups using the NFS or Samba server software included on the Schatztruhe CD, as a print-server, a web-server, or a security gateway. Of course, with Apache and Perl—also included on the CD—you can build a dynamite electronic commerce server or intranet. If you decide to build a server, be aware that Linux natively supports most SCSI tape backup drives.

Red Hat Linux 5.1, as sold by Schatztruhe, is nearly identical to Red Hat Software's Amiga distribution on the Red Hat Rough Cuts CD-ROM. However, Red Hat does not support any software included with Rough Cuts. Both versions are distributed under the General Public License, which allows them to be obtained for free from the Internet—but it's very handy to have the CD-ROM for quickly adding and removing software components. The Schatztruhe Red Hat 5.1 CD can be obtained from many Amiga dealers for around \$50.

Schatztruhe offers support for all customers who have purchased their Linux CD. Amiga Linux users can also find support on the Internet newsgroup `comp.os.linux.m68k` and at <http://www.linux-m68k.org>. Commercial consulting for Amiga Linux is available from Pantheon Systems LLC by calling 440-353-WEB-2. Amiga Linux users sometimes have their support issues addressed on Ziff-Davis Television's daily computing show, *The Screen Savers* (www.zdnet.com).

The m68k Linux source code, which can be used to compile Linux on Ataris and classic Macintoshes, too, is available upon request to Schatztruhe or at ftp.redhat.com. For more information about Red Hat Linux in general, see www.redhat.com.

Linux

Linux File Server Solutions for the Networked Amiga and Friends

By Ted Wallingford

So, your four Amigas' hard drives are all full? Perhaps none of them are full, but you're having trouble moving that fourteen megabyte file from one Amiga to another on floppies. Rest easy. With Linux and a bit of network cable, your problems are solved.

When it comes to storing or transferring large files, any Amiga with OS 2.0 or higher and a network adapter should have no reason to complain. By installing a file server on your network, you can enable all of your Amigas, and other types of computers, to share files. There are three methods for file sharing, with varying degrees of installation difficulty and capability.

File Transfer Protocol (FTP), the first method of file-sharing, may already be familiar to you. Most Linux distributions come with an FTP daemon, the program which runs on the file server and provides the file sharing capability. Usually, FTP daemons are used to run Internet-based file archives. But for a disk-space-hungry Amiga, an FTP daemon running on a Linux machine will do the job fine.

When you have an FTP server, your Amiga can connect to it in several ways. Using a web browser, you can request files for download from the server, but in order to upload them, you'll need dedicated FTP client software (like DaFTP which comes with I-Net 225 TCP/IP stack or AmFTP from Vaporware).

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Linux

In order to make the FTP server appear as a part of your Amiga file system, though, you'll need to get the excellent FTPMount package from Aminet (www.aminet.org/~aminet). This will allow you to drag and drop files from the FTP server on the Workbench, as well as call up the FTP server in system file requesters.

There are drawbacks to using FTP for file sharing. First, since FTP was not intended to be used in a fully-integrated file-sharing environment, FTPMount doesn't always behave as expected. Second, FTP is not very secure, as it transmits your user login and password without encryption over the network in order to establish your connection.

One of these problems is addressed by Network File System (NFS), a file-sharing protocol and application suite originally created by Sun Microsystems. NFS addresses the stability problem of FTP, and consistently works as FTPMount intends to work. With NFS client software (a device driver available with the I-Net 225 TCP/IP package from Interworks), the Amiga can mount the server's disk volumes as though they were Amiga disk volumes.

This is advantageous, since the NFS device drivers for the Amiga were written to a spec which called for the possibility of remote volume mounting, unlike FTP (which doesn't understand volumes at all). Unlike FTPMount, NFS-mounted file server volumes can appear as Workbench disk icons, not just drawers. NFS is considerably more difficult to set up than FTP, but it is much more stable, and allows file sharing with correctly equipped Windows-based and Mac-based setups. Most Linux distributions include an NFS daemon, an NFS client, and instructions on setting up a file server.

The most extensive, and certainly the most difficult, file-sharing solution for Amigas is called Samba. Samba is a

Unix clone of the Windows peer-to-peer network client (the Microsoft Client for Windows Networks). Samba is very similar to NFS, in that it offers a system-friendly client device driver that can be used to mount a remote computer's disk volumes. A Samba server-daemon must be running on the Linux file server, of course.

Samba addresses the security flaws of FTP and NFS by transmitting passwords with encryption, and it allows the most open connectivity solution, since Macs and Windows both come equipped with a Client for Windows Networks. The Samba client for Amiga and other platforms is available at www.samba.org. An added feature of Samba is that it allows your Amiga to share files on a Windows file server, too.

Not all Linux distributions come with Samba, so your best bet will be to download it from the Samba site. Whether you choose, FTP, NFS, or Samba for file-sharing, your Amiga will thank you when you loosen its free bytes.

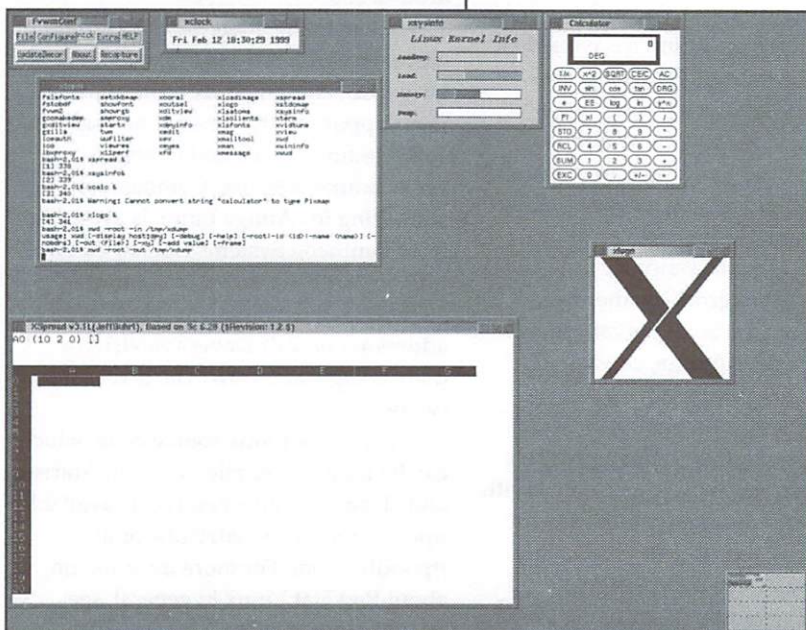
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THE PENGUIN HAS LANDED:

There are no two ways about it. Linux is popular. Some pundits predict a 200 percent increase of operating system use in the coming years. Many in the Linux community are absolutely, completely, positively sure that Linux will knock Microsoft off the OS throne.

Two factors currently block Linux from reaching that lofty goal. First, what a PC columnist labels a "religious war" rages between supporters of the various but not-quite-completely-compatible Linux flavors. Second, the OS still can be tough to install and configure.

Debian 2.0 takes a bead on the latter problem. Once you download the required files (see sidebar) and unarchive them to the Amiga hard drive, the Linux install process is relatively painless. The most difficult portion is probably the partitioning of the hard drive and writing an Amiga boot script. Debian uses an intelligent installer,



An under-construction (note FvwmConfig panel in upper right) X Window setup running on an A3000's Picasso II graphics card, with several random clients splattered over the screen using Debian GNU Linux.

DEBIAN 2.0 GNU LINUX FOR THE AMIGA

by Nick Cook

generally only needing a confirming keystroke here or there to set up the Linux system. A nice touch is that the Debian distribution automatically sets up a user account on the first boot of a fresh system. Frank Neumann's installation instructions cover all that clearly, although a couple of errors are present (the syntax for the AmigaDOS "protect" command is incorrect, for example).

The Debian distribution also makes installing additional "packages" of programs easier than wrestling with the occasionally temperamental UNIX/LINUX "make" command. The "dpkg" and "dselect" commands unarchives, copies and configures files having a ".deb" suffix. Even if the install process halts because you need to download more libraries, for example, dselect will pick up where it left off once you supply the missing piece. Dpkg and dselect handled not only single programs well, but also the relatively complex setup required for printer control and X Windows. Even with dpkg dealing with most of the heavy stuff, you will still have to modify the basic configuration files for many programs. For instance, the printer port needs to be changed, and the X Window config file has to be modified to recognize the Amiga mouse. While neither alteration is major, it points out that Debian, like any Linux or BSD distribution, is not a carefree "plug and play" experience.

System installation and setup has been smooth with my A3000. The PPP connection didn't work until I figured out that I had to send a specific initiation command to the modem, something I haven't had to do on the Amiga side. The remaining major problem is a deep hatred between Linux and my CD player. Each one believes that this computer ain't big enough for the both of them, so they engage in an electronic duel-to-the-death.

An annoyance appears in the X Window package. The server only supports the default 16 color, 640 by 400 display, which looks pretty sappy on a 17-inch monitor. However, with some fiddling (which I learned from another Linux user, not from any documentation), the resolution can be kicked up to 800 by 600 on my Picasso II card.

Things went rougher on my A2000. Linux experiences what knowledgeable folks assure me is a "kernel panic" — the OS essentially tosses its cookies — every so often. It could be caused by moon phases for all I know, but a reboot usually takes care of it. At least I have company. The helpful folks on the Debian mailing lists and on the comp.os.linux.m68k newsgroup frequently discuss installation troubles on Mac and Amiga platforms. Again, this drives home the point that the world of free operating systems can be an unpredictable place.

Debian 2.0 is a good news/bad news proposition. The good news is that the Amiga is officially supported by a solid, mainstream Linux distribution that isn't that tough to install. The bad news is that it is Linux. You must enjoy, or at the very least tolerate, heavy OS tinkering to use Linux. You'll need to do a fair amount of script and configuration file writing, as well as performing such mundane tasks as mounting additional drives. In other words, moving from the AmigaOS to the LinuxOS is like going from a car with an automatic transmission to a stick shift, with double clutching. Also the commercial programs most home users want, such as Netscape, Star Office and Corel's WordPerfect, haven't been compiled for the m680x0 cpu.

Nevertheless, Debian GNU Linux works for me. It can keep you occupied while we wait for the AmigaII.

Linux



WHO IS DEBIAN, ANYWAY?

Debian GNU/Linux is a free distribution of the GNU/Linux operating system. It is maintained and updated through the work of approximately 300 users who volunteer their time and effort.

Linux kernel based operating systems are POSIX based, freely distributable, and includes features such as true multitasking, virtual memory, shared libraries, demand loading, proper memory management, TCP/IP networking, and other features consistent with Unix-type systems. It is used by individuals and organizations worldwide.

Find more information on the website: <http://www.debian.org>.

GOT LINUX?

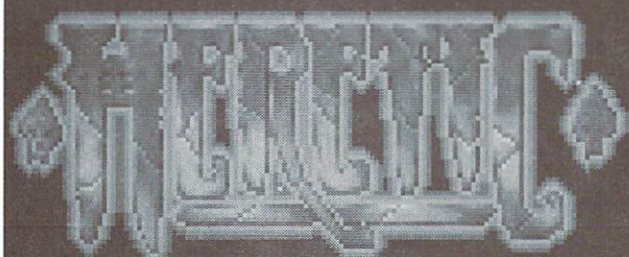
Want to try Debian Linux? This will start you off:

1. Check the December 1997 issue of *Amazing Computing/Amiga* or <http://www.linux-m68k.org/faq/faq.html> to see if your Amiga has the horsepower to run Linux.
2. Download the latest installation instructions from http://www.informatik.uni-oldenburg.de/~amigo/debian_inst.html
3. Download "amiga/amigainstall.lha" and "common/

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PC Ports Part 2



and



by Jake Frederick

A few months ago I reviewed some PC games that had become available to Amiga gamers via freely distributable source codes. Fortunately the trend seems to have caught on as a few more have recently popped up. Once again the talented Amiga programmers have proved their worth, and we now have two new games to keep us from our responsibilities!

Heretic

Despite being based around the Doom engine, Heretic brings an entirely different atmosphere to the screen. The game is set in a medieval environment with castles and magic crossbows rather

than the infernal lava pits and twelve gauge shotguns prevalent in Doom. Although the gameplay is essentially the same (kill some baddies, collect some keys, open some doors) there are a few subtle differences such as the various items that can be collected and used at any point throughout game. For me, the new weapons are reason enough to play Heretic. Frying enemies with the "gauntlets of the necromancer" is one of the most satisfying experiences I've had in a first person shooter.

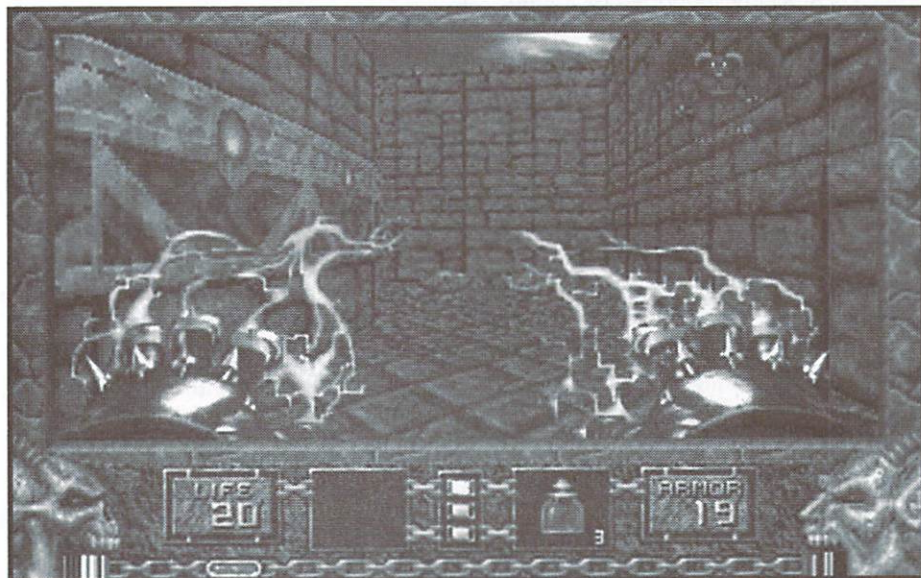
At the time of this writing, there are several Heretic ports available for both 68k and PowerPC Amigas, although most of them are in the very early stages

of development. I have found Sebastian Jedruszkiewicz's version (currently at revision 0.6) to be very polished while offering the most interesting features. All of the usuals such as music, AGA, Cybergrafix and joystick support are present but it's the two high color modes that allow a HAM6 or HAM8 display that really make this port stand out. With high color enabled, the bilinear filtering option can also be used, resulting in a fairly breathtaking spectacle. Also of notable interest is the option to play the game in a window on your Workbench, albeit quite slowly unless you have a fast machine and a graphics card.

The archive works on 68k and PPC machines, however, the author has stated that most of his work has gone into optimizing the PPC side thus far. I was getting an average of 7 frames per second on my AGA '040/25 so I suspect anything slower would border on unplayable. The PowerPC version apparently runs around 30 frames per second on a 603/200.

Hexen

Hexen takes the genre a step further than Heretic by incorporating elements of various role playing games with the standard destructive mayhem offered in most first person shooters. There are three diverse characters to choose from; a fighter, a cleric and a sage, each with varying levels of speed, armor, magic and strength, as well their own unique



Sebastian Jedruszkiewicz's Heretic port has all of the usuals such as music, AGA, Cybergrafix and joystick support, but it also includes two high color modes for a HAM6 or HAM8 display.

Magic Cards

By Jerimy Campbell

Magic Cards is a collection of 18 solitaire type card games from Germany's PRZsoft. Magic Cards graphics are clear but plain. The card games are referred to as patiences in the manual and appropriately so, since I found that a lot of patience is required to learn the rules of each game. I personally prefer a good old fashioned game of poker, but must admit that some of these solitaire games can be very addictive. These kind of games really force you to use your brain and can help to keep you sharp.

Magic Cards is a rather basic game that should be able to run in Workbench. In the main menu screen you can select between PAL or NTSC display modes by simply pressing the Tab key. This is one feature I wish all European games developers adopted. It looks better in PAL and requires some scrolling in NTSC.

Magic Cards has music and a few mediocre sound effects but for this type of game they're adequate. Magic Cards does have an admirable amount of options, and I found the "suggest a move" and "demo mode" to be especially useful as a tutor of sorts. It also has sufficient in-game directions for each game. It certainly seems to be competently programmed.

Magic Cards comes on a single self booting floppy and cannot be installed to hard drives. Unfortunately, the game does not multitask, it totally takes over your system, there is no quit option, and it requires 2 resets before you can boot anything else.

While the instructions are in English the actual name of each game remains in German and some of the cards haven't been changed either. For instance, the Jack and Queen are labeled B & D instead of J & Q. It would have been nice if the games had English titles. It's not all that difficult to decipher which card is which, but it is annoying none the less.

I was unable to contact PRZsoft to see if they were willing to do something about some of the program's shortcomings. The only way to contact them seemed to be by snailmail or a call to Germany. It is difficult to see why anyone would send \$25.00 to Germany for this game unless you are just very desperate for card games for their Amiga. I appreciate brothers Frank and Stefan Przybylskis efforts in producing this game but \$25 is a lot of money for this game, especially since you have to mail it to Germany. Therefore, I can only give it a C-.

The game was tested on an A1200 060, 50MB RAM, and OS 3.0. There is a very well done Freeware demo of the game available on Aminet which has only one game enabled. It is located under game/think/Magic_cards.lha. The demo includes very specific ordering information. You can contact the author at: Stefan Przybylski Heckscherstrasse 4 20253 Hamburg Germany. Phone: 0049-40-497247

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weapons. The game relies on hand to hand combat more than it does on guns and projectiles which provides a refreshing change of pace. There are a few weapons of mass destruction to be found, but most of the time you will find

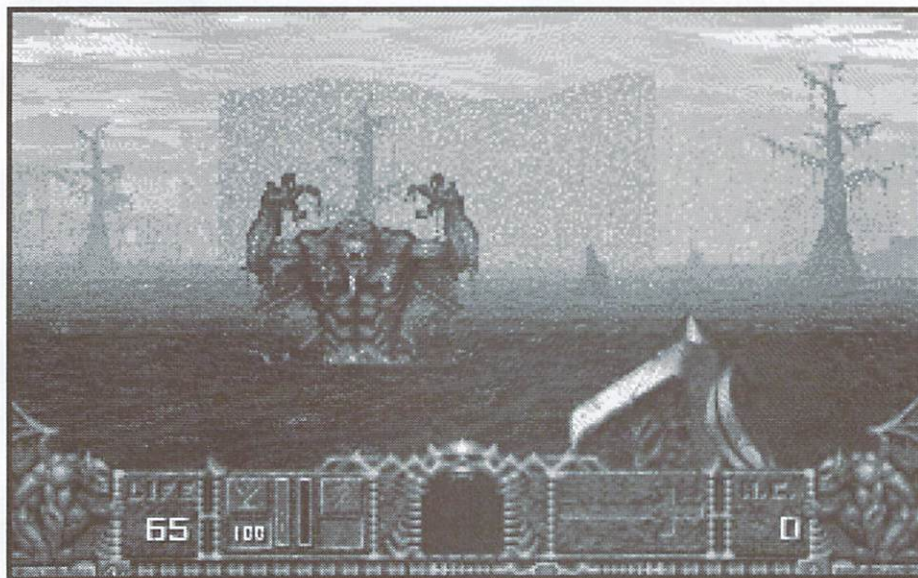
yourself clubbing and hacking your opponents to death rather than blowing them across the room.

It seems that Hexen has taken the back burner while coders perfect their Heretic ports as most of the current

versions are quite slow and buggy. I have been using Christian Sauer's Hexen68k which features AGA and graphics card support, 16 channel stereo sound, mouse support and soundcard support via AHL. The documentation states that an '020 is required but since my machine struggles to achieve a frame rate exceeding 5 frames per second I would suggest at least an '040 with a graphics card. There are several Power PC versions as well, though I can't comment on their quality and performance.

Both ports require the corresponding shareware or commercial wad to be present in the same directory (Note: When using the shareware wad with Hexen you must enable the -shareware option). All of the ports and necessary files can be found at <http://privat.swol.de/thomaslorenz/amiga/index.html>. The source codes for both games are available at <http://www2.ravensoft.com/source>.

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Hexen relies on hand to hand combat more than it does on guns and projectiles as you become either a fighter, a cleric or a sage, each with varying levels of speed, armor, magic and strength, as well their own unique weapons.

Games News And Previews

by Jake Frederick

Another month brings more good news from the world of gaming. It was not long ago that the Amiga games scene was on the verge of extinction, now it's difficult to keep up with all of the latest developments! The future is looking better every day.

ClickBoom News

The text "In space no one can hear you scream" recently appeared on ClickBoom's web page, generating a stir of speculation among all those who visited the site. It has now been indicated that the mysterious message was a

reference to ClickBoom's latest signing, Trauma Zero. The game is a sideways scrolling shoot 'em up in the tradition of Project X and numerous other classics.

Simultaneous two player mode, real time animated backgrounds, 50+ weapons, and real time translucency effects are all part of the arsenal T-Zero will use to elevate itself from the depths of mediocrity into which games of this type tend to fall. The full version should be released in several months, so, for now, check out the early unplayable demo which can be downloaded from <http://wuarchive.wustl.edu/pub/>

aminetgame/demo/traumazeroP2.lha or from any other Aminet server around the world.

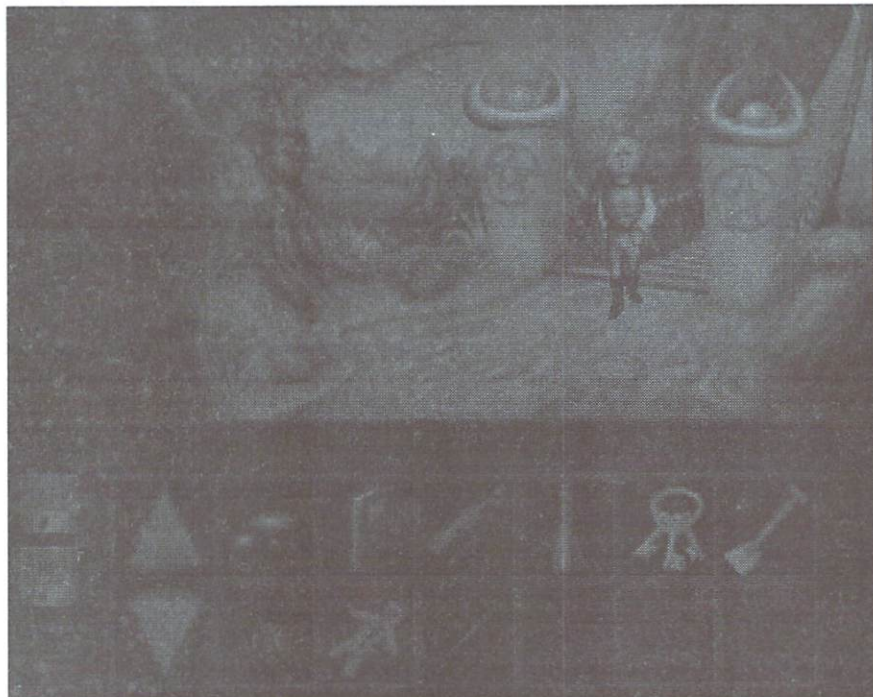
In some less games related news, ClickBoom has announced Portal, its latest web-based service that allows Amiga users to correspond and participate in activities such as on line auctions. For more information visit ClickBoom's web site at <http://www.clickboom.com>.

Maim & Mangle Revived

Maim & Mangle is a real time war game being developed by The World Foundry (the same team behind Explorer 2260, which was previewed in the *Amazing Computing/Amiga* December issue). The game was actually cancelled several months ago when one of the developers left the team to pursue PC programming. Fortunately a new team has stepped forward to continue development and bring it back up to date.

The feature list is quite impressive, but the 3D environment is what will really set Maim & Mangle apart from the competition. All buildings, vehicles, and landscapes will be completely 3D, allowing real time rotation and zooming as well as a great deal of interaction with surroundings. Units can hide behind hills, infantry can scale cliff faces and canyons, and vehicles can fall off cliffs. Units will also progress slower on inclines than on declines, and have longer fire range on hills, but will have a blind spot immediately below them. Other features include multiplayer TCP/IP games with a save option, night-time combat, weather effects, light sourcing, and a number of visual effects.

As you can see, the depth of this game looks to be tremendous, so it's naturally going to be pretty taxing on your system. The tentative system requirements are an '040 (though this may be changed to an '060), 8MB or RAM, CD-ROM drive, AGA or graphics card, AHI, and a modem with an internet account for network games. The current Phase 5 PPC accelerators will be supported as well as future Escena G3 cards. 3D hardware will also be taken advantage of in the form of the Warp3D v2 driver system.



The newly formed Swedish team, Altertaste, are working on Abducted with 256-color graphics, 3D animation sequences and sampled speech for all dialogue. In 1734, Slugbert Cramfish is abducted by aliens and then returned ten years later to battle evil demons in his hometown.

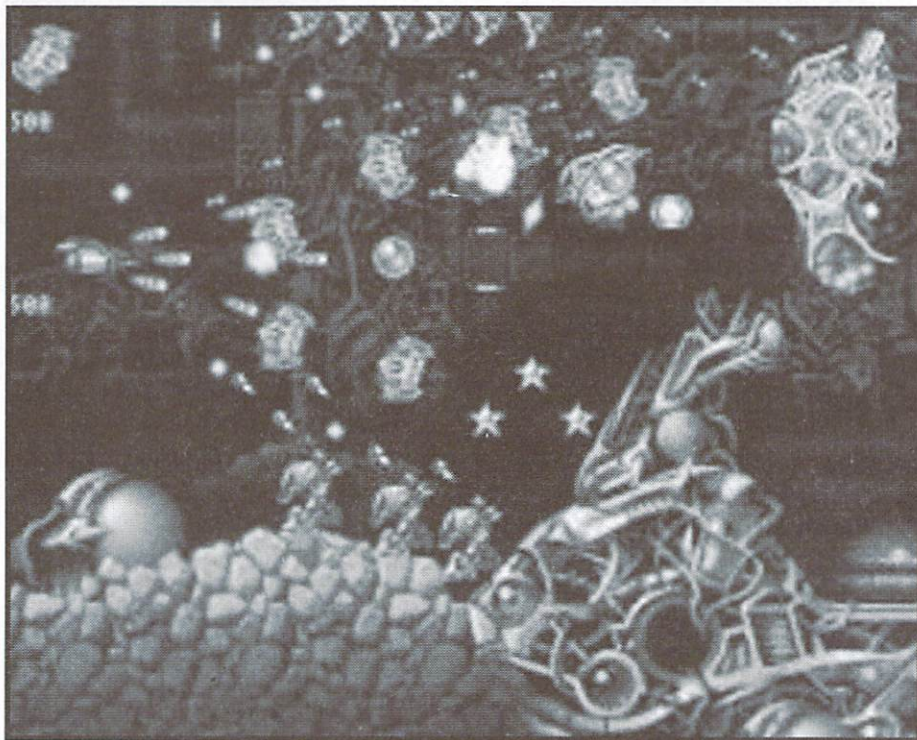
Abducted

Aftertaste, a newly formed team from Sweden are working on a point and click adventure called Abducted. The game puts you in control of Slugbert Cramfish, who has been abducted by aliens in the year 1734. After spending ten years in space Slugbert is returned to his hometown of Pomperville to find that evil demons have possessed his father and taken over the village. It's your job to get the town out of this horrible predicament.

The game will feature 256-color graphics with 3D animation sequences and sampled speech for all dialogue. It will support AGA, graphics cards, and 16 bit sound and should come on a CD-ROM. The team is currently looking for a 2D graphics artist to help with the games production. If you think you can be of assistance e-mail them at aftertaste@hotmail.com.

Max Rally and Oloflight Demos

Fortress and The Real Ologram have released demos of Max Rally and Oloflight, both of which were reviewed last issue. The Oloflight demo can be obtained from <http://>



In space no one can hear you scream.

ClickBoom's Trauma Zero will be a sideways scrolling shoot 'em up with simultaneous two player mode, real time animated backgrounds, 50+ weapons, and more.

www.ologram.com and the Max Rally demo from <http://www.allcomm.co.uk/~fortress>.

If you have any announcements you would like to share with Amiga gamers

send me an e-mail at gonzo@acadia.net. If you're not already net accessible write me at Jake Frederick C/O Amazing Computing/Amiga, PiM Publications Inc., P.O. Box 9490, Fall River, MA 02720.

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Code Name Nano

By Jeremy Campbell

Code Name Nano from F1 Software is a clone similar to the games Thrust or Fleutch—both of which were released a while back. The object of Code Name Nano is to pilot your space ship (with the joystick) through levels of varied worlds and rescue humans. While navigating your ship you are constantly fighting gravity and often being tugged by magnetic fields. Along the way you will be required to shoot or bomb your way through barriers and sometimes throw switches to complete the mission. The perspective is 2D and the levels extend into multiple screens as you progress.

I found that the game requires quite a bit of patience and it is quite

challenging, but far from impossible. Many similar games are all about controlling your craft, but this one has incorporated a touch of puzzle solving also. I like that.

The game is very well programmed and the colorful graphics are detailed and appealing. It has an attractive introduction with excellent music and the in-game sound effects include digitized speech. Code Name Nano has an extensive options screen which allows you to change the settings to your liking. It also has helpful in-game information screens. Best of all are the level codes that allow you to begin the game wherever you left off.

A hard disk installer is included but it boots fine from floppy too. You will need to put your Amiga into PAL display mode to prevent some of the screen from being cut off at the bottom. The game is provided on one floppy disk

and should work on virtually any 1 MB Amiga.

Code Name Nano is much improved over any of its predecessors that I have seen and an excellent licenseware value, so it gets a B+ rating. It was Tested on an A1200 060, 50 Mb RAM, and OS 3.0. It is available for \$6.50 exclusively through Mushroom Software, 75 North Perry Street, Elizabeth town, PA 17022 Tel: (717)-367-6210 email: mushypd@redrose.net Url: www.mushy-pd.demon.co.uk.

There is no downloadable demo of this game but at \$6.50 you're not losing much. To get additional info on a wide selection of F1 Licenceware, point your browser to [ftp://mushypd.dynip.com/pub/amiga/demos/](http://mushypd.dynip.com/pub/amiga/demos/) to download a free DMS file of excellent F1 and 5th Dimension Licenceware titles.

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A Quick take on QuickTime and the Amiga

Want to see some of those clips from the movie sites or even catch a South Park episode? Time to hook your Amiga up to a QuickTime player.

By Fabian Jimenez

Chances are you have come across a website, game, or multimedia CD-ROM that uses Apple's QuickTime architecture. If you have played Myst, downloaded a Disney movie trailer, or purchased certain video CDs, then you have seen QuickTime in action. It is quite ironic that, until a few years ago, the "multimedia computer" known as our beloved Amiga was unable to view QuickTime files.

With the demise of Commodore, and the flight of commercial developers from the platform, QuickTime support for the Amiga may have been left unfulfilled. After all, it would not be the only time that a proprietary standard would not

find its way to the Amiga—to this day the Amiga is in sore need of an official Real Video player.

Do not despair! The four programs reviewed for this article offer Amigans a solution for viewing QuickTime files. The programs tested were QT, CyberQT, MaVi Player, and MooVID. While none provided an overall solution to the QuickTime problem, they do allow you to view most of the files found out there. To understand the complexities of QuickTime, a brief review of its "architecture" is needed.

Under the Hood of QuickTime

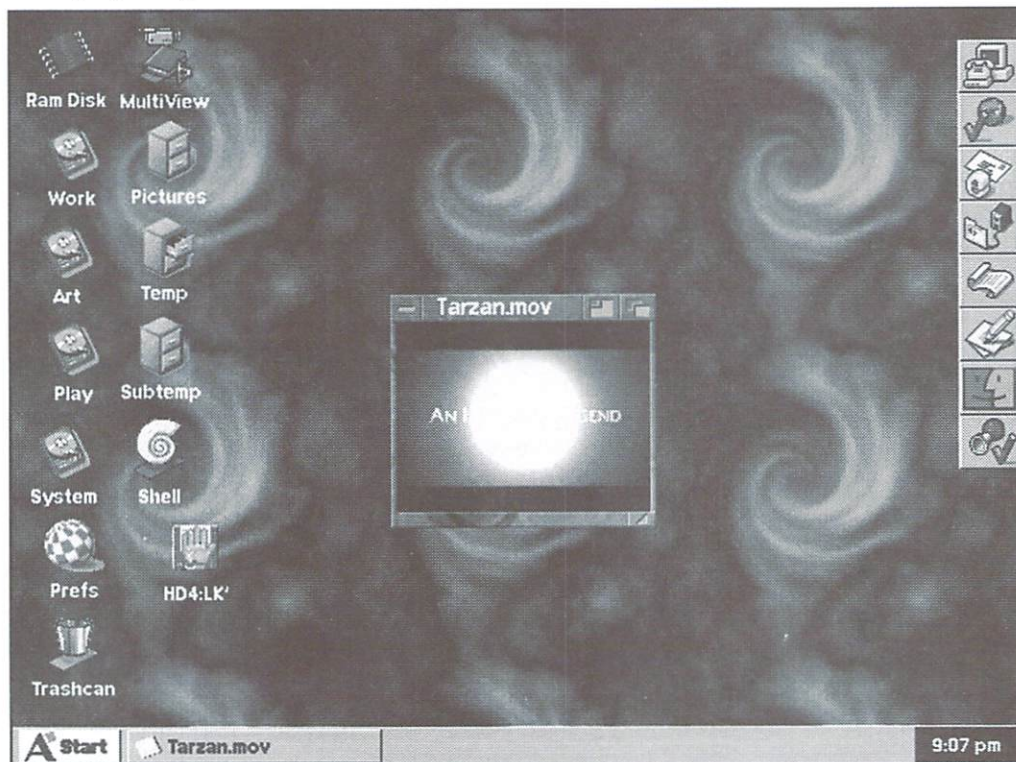
While most people think of

QuickTime as a digitized video file format due to the many MOVies they have seen, it is in fact much more according to Apple's QuickTime "White Papers". Apple developed QuickTime as a software architecture for the integration of all types of digital media, not just audio and video. The three main parts to QuickTime are the QuickTime Movie File Format, the QuickTime Media Abstraction Layer, and a set of QuickTime Media Services.

The QuickTime File Format is a container format responsible for storing the media assets, and the description of the overall composition of the digital media. Besides the storage of the

individual video frames and audio samples, QuickTime can specify the spatial relationship needed between the two parts, or media assets. QuickTime does not always adhere to the standard 24 frames per second. Thus, spatial information is needed to allow frame skipping which prevents unsynchronized audio during playback.

Concerning the individual media assets for the QuickTime File Format, it is important to note that the audio and video portions of the file can be stored in various formats that utilize various compression schemes also known as codecs. The most coveted video codecs are the latest Indeo video codecs, version 4 or greater. QuickTime also



Thore Boeckelmann's CyberQT QuickTime player.

supports common file formats from the PC. Supported file formats include AVI, JPEG, MPEG, AIFF, MIDI, and WAV can be used without conversion in QuickTime.

The QuickTime Media Abstraction Layer specifies how software tools and applications access the set of QuickTime Media Services available. The Media Abstraction Layer also determines how hardware can accelerate performance during critical portions of play back. Most of all, the Abstraction Layer allows developers not to be concerned with the underlying hardware of the system. If done right, this insures the QuickTime application will function properly on any machine, even taking advantage of any new hardware improvements. The QuickTime Abstraction Layer allows developers to specify new components if needed.

The available QuickTime Media Services ease the software developer's task in creating applications requiring digital media as accessed through the QuickTime Media Abstraction Layer. Media Services built into QuickTime include timing, synchronization, compression, image blitting, scaling, audio mixing, media I/O, and media capture. For Apple's latest version, QuickTime 3.0, new services include "Visual Effects" for digital video.

QuickTime Amiga Programs

It is obvious to see how complex and robust the QuickTime Architecture is, and the various issues it presents. Up until now the major difficulties for most of the Amiga playback applications has been support for the various compression codecs used within QuickTime files. None of the Amiga programs reviewed support version 4 or better of the Indeo video compression codecs. This is due to the high licensing fee involved.

Testing was done on an Amiga with a Phase5 MKIII 060 accelerator, 48 Mbof Fast RAM, 12x IDE CD-ROM, 3

Gb IDE hard drive, and an EGS Spectrum graphics card running Picasso96. Three QuickTime files were used for testing. The first file was the movie trailer for Disney's "Tarzan" using the 24-bit Radius Cinepak codec for video, and the 8-bit PCM raw codec for audio compression. The second file was a short episode of "South Park" when Jay Leno visited using the 24-bit Indeo 3.2 for video, and 8-bit PCM raw for sound. The last file was a full episode of South Park using the Indeo 3.2 video codec and multiple 8-bit PCM audio codecs.

QT: AKA "Cute"

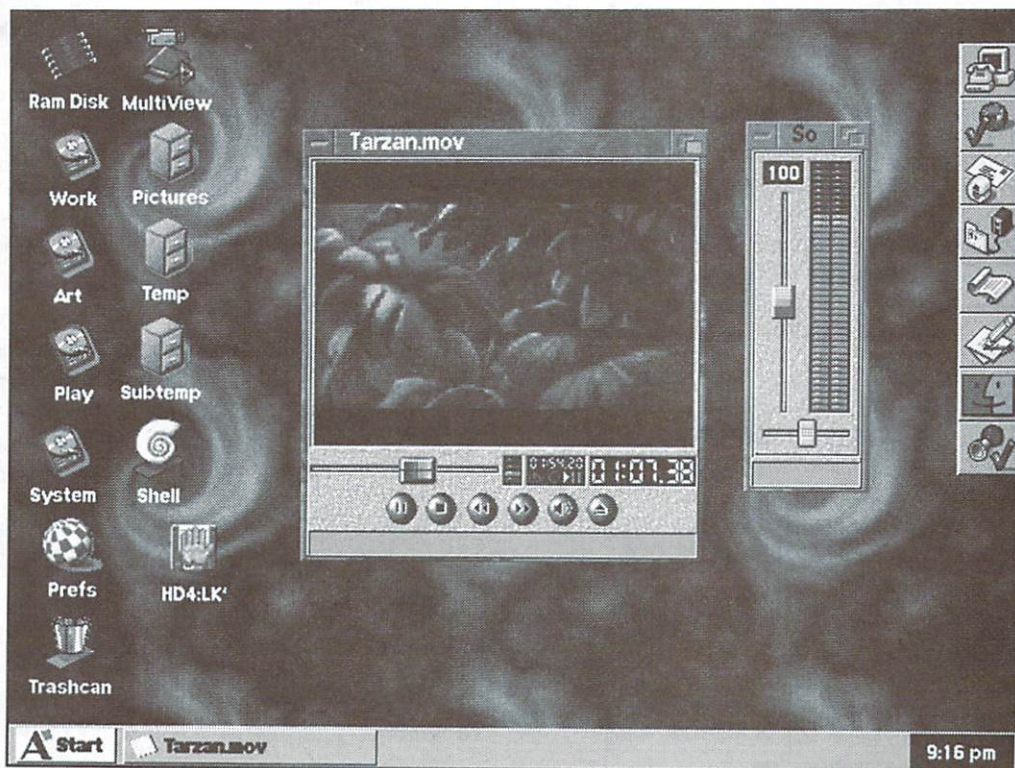
One of the first programs for the Amiga to play QuickTime files was Marcus Comstedt's freeware program called QT (pronounced "cute"). While QT presented Amigans with the first practical way of viewing QuickTime movies, its support of the various forms of compression was limited.

QT's requirements were nominal, supposedly any Amiga with at least a 68020, 8MB RAM, and AGA graphics would suffice. Experience dictates however that an Amiga with a 68040, 16MB RAM, and a graphics card is more

suitable. QT does have limited support for CyberGraphics. Installation was fairly simple, just grab the archive off Aminet and place QT where you would like it. Since QT was meant for CLI usage, I placed it in my command directory C:.

QT is easy to use if you don't mind the CLI, most of the time you could just type QT and the filename. QT would use default conditions and try to pick the best screen mode available. QT does have some options available to improve playback using command switches. Out of the three QuickTimes used for testing, QT was only able to playback the Tarzan movie trailer. QT did not support the old Indeo video codec used in the other two QuickTime files, nor did it support the multiple audio codecs employed in the full South Park episode.

Another problem with QT was that it tried to buffer the whole file into memory before playback. Most Amigas, even those with 16MB Fast RAM, encountered problems when playing back lengthy files. During playback, there is no GUI interface to allow the user to control playback. However, keystrokes are supported during playback to stop or control the playback speed.



Pro-Dev's MaVi (Multimedia Audio Video Interface) API System uses a Windows-like "Registry" program to control MaVi's functionality.

See For Yourself!

Witness this important Amiga events first hand.



QNX Announcement!

November 13, 1998

If you were not able to attend this historic event, this tape gives you a close-up view of what you missed. If you were there, this tape is your opportunity to view Dr. Alan Havemose and Dan Dodge over and over to better understand their detailed demonstrations and information.

2 HR Cologne 98 Presentation Video
\$14.95 plus \$5 S&H

Amazing Computing Subscribers:
\$14.95 for the 2-Hour Video
(US-No Shipping charge)
\$2.95 for all foreign shipping

Non-Amazing Computing Subscribers :
\$16.95 for the 2-hour Video
plus \$5.00 for US shipping
\$8.95 for all foreign shipping

All Video Orders will be shipped by US or Global Priority where available.

You can use VISA, MasterCard, American Express, and Discover and order by phone at:

1-800-345-3360

toll-free US and CANADA.

Foreign orders, please call: 1-508-678-4200. For Fax orders, dial 1-508 675-6002

If you pay by check, it must be in a US bank in US funds to:

PiM Publications Inc.
P.O. Box 9490
Fall River, MA 02720

For those using only AGA displays, QT would be your best choice. If you are serious about viewing QuickTime on your Amiga, or would like to use a more robust program then you will need to add some muscle to your machine. QT is available on Aminet at: aminet/gfx/show/qt14.lha

CyberQT

Thore Boeckelmann released CyberQT soon after QT came out on Aminet. Keeping to the tradition of QT, CyberQT is free. Among CyberQTs improvements were greater support of compression codecs, optimization of program code, and better support for CyberGraphics' retargetable graphics system. CyberQT also featured playback on the Workbench when run on a public screen greater than 8 bits (256 colors) in depth.

While CyberQT, like QT, was meant for CLI usage, Thore included Argue with version 1.4. Argue is a Magic User Interface (MUI) based program that tries to generate a GUI for all the parameters or switches that a CLI command utilizes. With this GUI, one needs only check off the boxes for the options that they wish to employ. CyberQT supported most of the command options found in QT.

Installation of CyberQT is very simple. CyberQT does not require any special directories or assignments made in your User-Startup file. In fact, I installed it in my C: command directory to place it in my computer's DOS path. If you plan to use the Argue GUI with CyberQT, then it is advised that you install it to its own directory so that the GUI file won't be placed in your C: directory. Argue will also require that you have MUI running on your machine.

During playback, CyberQT does not have any graphical interface for controlling the playback of the file you are viewing. However, you can press certain keys on your keyboard to pause, stop, and control playback speed. I found that CyberQT performed best when setting the screenmode to a 16-bit mode, with the audio portion preloaded. Those with speedier graphic cards can stick with the 24-bit screen modes.

CyberQT did well with the movie trailer from Tarzan playing both the audio and video portions correctly. However, CyberQT was unable to play back the video portion of the South Park Jay Leno episode due to its lack of support for Indeo 3.2. CyberQT failed to playback any portion of the full South Park episode with multiple codecs. Instead of quitting though like QT, CyberQT still proceeded to attempt playing the file causing the performance of the machine to become very sluggish. With no easy way to cancel the process, I had to wait until CyberQT finally gave up.

A recent development concerning CyberQT (as well as CyberAVI) was that the source code for the program was placed on Aminet. Thore Boeckelmann recently stated, "I have no more time to continue development on these programs. So I decided to release the sources, because I think it is worth the effort to make something better of it."

It would be nice to see CyberQT pick up a real GUI interface as well as support for at least version 3 of the Indeo codec. CyberQT is available on Aminet at: aminet/gfx/show/CyberQT.lha. Source Code for CyberAVI and CyberQT is available at: aminet/dev/misc/CyberXXXSrc.lha.

MaVi-Player

MaVi-Player is a multiformat playback program developed for Pro-Dev's MaVi API System. MaVi stands for Multimedia Audio Video Interface which uses a Windows-like "Registry" program to control MaVi's functionality instead of using entries in the ENV: or E NVARC: directories. MaVi-Player uses the Magic User Interface GUI available on Aminet. Besides QuickTime, MaVi-Player can handle most of the popular multimedia formats found out on the internet including, AVI, IFFAnim, GifAnim, AIFF, and WAV files. In particular, MaVi-Player handles files using the Indeo 3.2 video codec.

To install, you simply download the file, extract the archive, and run the installation script. For the hefty sum of \$45 you can register MaVi online and receive the keyfile to fully enable the demo copy (as well as send some bug

fixes). This registration process took only one day after my credit card was approved. Much easier than some of the nightmares North American's have encountered in registering shareware from Germany.

MaVi-Player is not for stock Amigas. Besides requiring CyberGraphics' RTG system (or Picasso96), you need to have a graphics card, Workbench 3.0, MUI, 8MB RAM, and a 68030 running at 50 MHz. MaVi also requires around 2MB of hard drive space to install, not including all the QuickTime files you have collected.

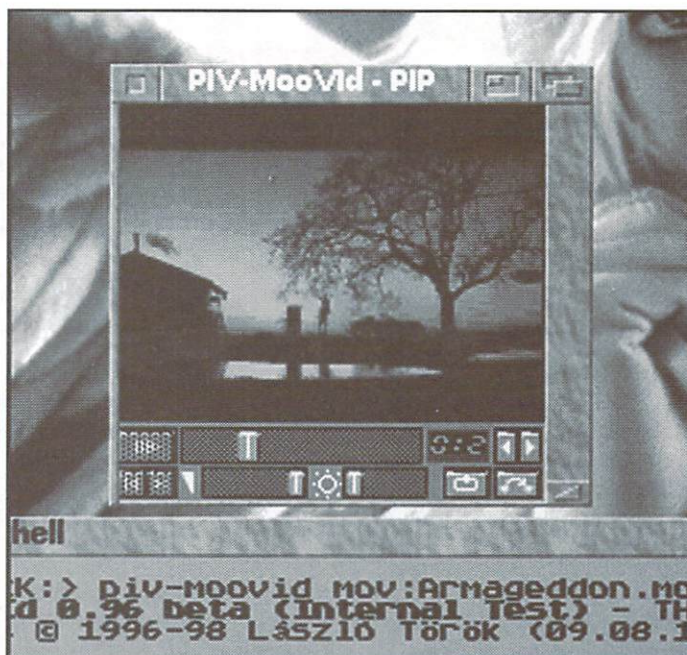
The interface is simple, clearly laid out with gadgets for playing/pausing the file, timer, sliding frame advance, and a separate window for volume control and balance. You have your choice between gadgets that are Amiga-ish, Window-ish, and a futuristic "Jet Audio". MaVi has menu options to scale the size of the window on playback, as well as set the screenmode (default is on the Workbench).

Testing the program, I ran both the Tarzan and South Park Jay Leno QuickTime files with no problem. The frame rate was good, and the sound was perfectly synchronized. On the third file, the full South Park episode, I was able to view the video, but I was unable to hear the audio due to the multiple sound codecs used, a feature that MaVi does not support. I was informed by Pro-Dev that it is unlikely that MaVi will add any new codecs or features, unless they receive more registrations.

One word of caution, MaVi does tend to crash frequently on some configurations. On my machine, using Picasso 96, MaVi did not like playing back files on the Workbench in greater than 256 colors. However, on its own screen, MaVi was able to playback in 16-bit and 24-bit modes. MaVi was the most polished program out of the four reviewed. For more information on MaVi Player, go to ProDev's website at: <http://www.mavi.de/mavi-us.html>. The MaVi-System demo is at: aminet/biz.demo/MaVi2-1T3.lha.

MooVID

A surprising newcomer is Laszlo Torok's MooVID. Like MaVi Player, it also features nice GUI, and support for



MooVID/PIV is a special free version of MooVID for PicassoIV owners.

some of the Indeo video codecs. However, unlike MaVi, it is not part of a larger "system". MooVID shareware fee is a reasonable \$10. A special free version of MooVID exists for PicassoIV owners called MooVID/PIV.

MooVID is coded in the native Amiga's Assembly Language for optimal performance, and it does support AGA based Amigas. It also has the nice feature of trying to simulate surround sound on the audio playback. As with the other programs reviewed, the stronger your Amiga is, the better.

Installation and usage was fairly simple. MooVID was designed to be used from either the Workbench or CLI. Double clicking on the executable brought up a file requester that is used to select the QuickTime file. MooVID was able to view all three QuickTimes used in testing, including the full South Park episode which employed Indeo 3.2 for video and multiple sound codecs.

During playback, there is a graphical interface to control playback of the file. If you are not a GUI fan, then you can use an option to disable the GUI. The Surround Sound emulation is nice, but sometimes causes interruptions in the playback of the audio portion of the

QuickTime file. The GUI controls were not as refined or responsive as those found in MaVi, and I did not find any mention of an ARexx port. An added benefit is that unlike the other programs reviewed, the author of MooVID is still working on improving the program.

A demonstration version of MooVID is available on Aminet at: aminet/gfx/board/PIV-MooVid.lha. Laszlo is developing a MooVID Pro version of the program that is going to be marketed by Epic Software. This version will feature more codec support, bug fixes, and more features. For more information on MooVID, visit <http://www.dfmk.hu/~torokl/>.

Conclusions

Being an Amiga owner no longer means that you cannot enjoy viewing QuickTime files. As long as you have an Amiga that is powerful enough to handle the decoding of the file, one of the above reviewed programs should be able to do the trick. Out of the four programs reviewed, I was most impressed with MaVi-Player's interface. However, I would rate MooVID as the best overall QuickTime viewer for the Amiga.

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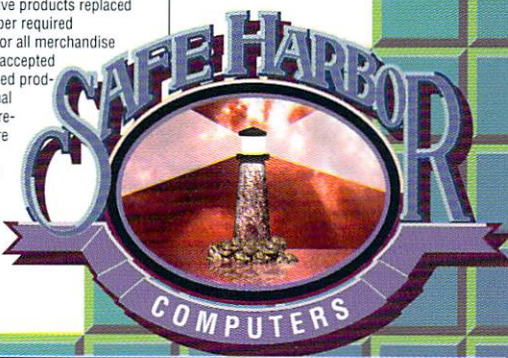
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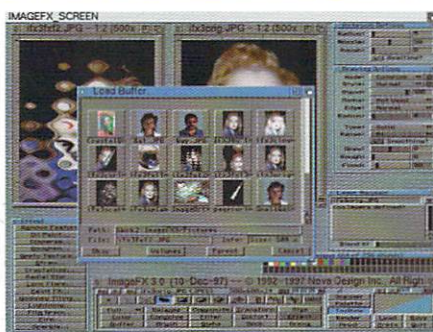
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